own of
SPRINGDALE

Municipal Plan

DeLCan DE LEUW CATHER CANADA LTD.
CONSULTING ENGINEERS AND PLANNERS

NOTICE OF APPROVAL

I, Hazel R. Newhook, Minister of Municipal Affairs, under and by virtue of the powers conferred by Section 25 of the Urban and Rural Planning Act, Chapter 387 of the Revised Statutes of Newfoundland, 1970, hereby approve the Springdale Municipal Plan, 1983, as adopted by the Council of the Town of Springdale on the 22nd day of November 1982.

Dated at St. John's this 18th day of July, 1983.

Original signed by Minister
Hazel R. Newhook
Minister of Municipal Affairs

In the presence of:

Original signed by Director
J. T. Allston, F.C.I.P.
Director of Urban and Rural Planning

COUNCIL RESOLUTION

Resolved, pursuant to Section 16 of the Urban and Rural Planning Act, that the Council of the Town of Springdale adopt the Municipal Plan entitled Springdale Municipal Plan prepared by DelCan, Consulting Engineers and Planners, St. John's, Newfoundland.

Resolved further, pursuant to Section 18 of the Urban and Rural Planning Act, that the Council apply to the Minister of Municipal Affairs and Housing for the setting of the time and place of a public hearing to consider objections or representations to the adopted plan.

PROPOSED BY: COUNCILLOR EVANS

SECONDED BY: COUNCILLOR JACKSON

Certified as a correct copy of a resolution passed at a meeting of Council held at Springdale on the 22nd day of November, 1982.

Harvey Tizzard, Clerk

SEAL AND SIGNATURE

Signed and sealed pursuant to Section 16 (3) of the Urban and Rural Planning Act this 22nd day of November, 1982.

Marguerite Austin
Mayor

(SEAL)

CLERK'S CERTIFICATE

Certified that the attached Municipal Plan is a correct copy of the Municipal Plan adopted by the Council of the Town of Springdale on the 22nd day of November, 1982.

Harvey Tizzard
Clerk

TOWN OF SPRINGDALE

NEWFOUNDLAND

MUNICIPAL PLAN

Undertaken for
THE SPRINGDALE TOWN COUNCIL

by

DELCAN

with the Financial Assistance of the
DEPARTMENT OF MUNICIPAL AFFAIRS
Provincial Planning Office
St. John's, Newfoundland

06-1380

November 8, 1982

TOWN OF SPRINGDALE
MUNICIPAL PLAN

TABLE OF CONTENTS

	PAGE
MUNICIPAL PLAN	
SECTION 1 - INTRODUCTION	1 - 1
SECTION 2 - GOALS	2 - 1
SECTION 3 - DEVELOPMENT CONCEPT	3 - 1
SECTION 4 - LAND USE POLICY	4 - 1
SECTION 5 - ROADS, TRAFFIC AND PARKING	5 - 1
SECTION 6 - COMMUNITY SERVICES AND FACILITIES	6 - 1
SECTION 7 - IMPLEMENTATION	7 - 1
SECTION 8 - INTERPRETATION	8 - 1
REPORT OF FINDINGS	
SECTION A - PHYSICAL BACKGROUND	RF1
SECTION B - HISTORICAL DEVELOPMENT	RF3
SECTION C - POPULATION AND THE ECONOMY	RF4
SECTION D - POTENTIAL OFF-SHORE OIL RELATED DEVELOPMENT	RF24
SECTION E - POPULATION FORECAST	RF31
SECTION F - HOUSING	RF33
SECTION G - COMMUNITY SERVICES AND FACILITIES	RF49
SECTION H - TRANSPORTATION	RF59
SECTION I - LAND RESOURCES	RF62
SECTION J - EXISTING LAND USE	RF66
SECTION K - WATER SUPPLY AND DISTRIBUTION	RF79

PAGE

SECTION L - SANITARY SEWERAGE SYSTEM RF84

SECTION M - STORM DRAINAGE RF88

SECTION N - ROADS AND PARKING RF89

SECTION P - MUNICIPAL FINANCES RF95

APPENDIX A - Site Plan Criteria

B - Suggested Placement of Structures on Unserviced Lots

C - Master Plan Process Chart

SECTION 1 - INTRODUCTION

1.1 TITLE AND COMPONENTS

This Plan when approved by the Minister of Municipal Affairs & Housing shall be known as the MUNICIPAL PLAN OF THE SPRINGDALE PLANNING AREA, 1982 - 1992.

The following text and Schedule A Future Land Use constitutes the Municipal Plan of the Springdale Planning Area. Supplementary data in support of the proposals contained within this Plan is included in the appendix bound together with this Plan. It is not intended that the appendices form a part of this Municipal Plan.

1.2 REVIEW AND AMMENDMENTS

It is not intended that the policies and land use designations described in this Plan shall remain static but shall be subject to continuous review and alterations as required in the light of changing economic, social and technological developments. Additionally a major review of all policies and land use designations is required every 5 years by the Urban and Rural Planning Act to keep this Plan up to date.

1.3 PURPOSE OF THE PLAN

Planning is a method which a community can use to manage growth and change that can be influenced and to adapt to that change which cannot. By preparing a Municipal Plan under the laws of the Province of Newfoundland, Springdale has taken the opportunity to look at its resources, its problems and its potentials and to make decisions at the local level about what they wish their community to become and how common goals can be achieved.

This Municipal Plan for the Springdale Planning Area has been prepared according to Sections 14 and 15 of the Act. In preparing the Plan, the community has looked at its goals, resources, problems and potentials. The result of this survey and analysis is recorded in the

Report of Findings. It provides a written report on the economy, finances, resources, population, land use, transportation facilities, municipal facilities and services, and such other matters that are related to the present and future economic, social and physical condition of the Springdale Planning Area.

The Municipal Plan is a legal document and its stated intentions must be implemented by subdivision control, zoning and the construction of public works and the preparation of development schemes. It is intended to guide urban development within the Town of Springdale to the year 1991.

1.4 PROJECTED POPULATION

A population of approximately 3,700 persons is projected to the end of the planning period.

1.5 PLANNING AREA

A territory subject to this Plan is that which is included within the boundaries of the Springdale Planning Area, as shown on Schedule A.

SECTION 2 - GOALS

2.1 GOALS FOR SPRINGDALE

Goals are valuable to a community so that the people have an agreed upon set of value statements to serve as a guide which will allow the determination of the degree of success or failure of community activities. This Plan will attempt to provide the appropriate policies and proposals with the objective being the achievement of these goals. Council will work towards these goals as they pass the necessary regulations to implement the Plan, and as they evaluate the development proposals that come before them. The goals are as follows:

2.1.1 To create an environment which will enhance the physical, social, cultural and economic well-being of the present and future residents of the Springdale Planning Area.

2.1.2 To promote an orderly and economic pattern of growth and development.

2.1.3 To expand and diversify the community's economic base in order to achieve a better balanced economic structure and to provide sufficient and varied employment opportunities to meet the needs of the community.

2.1.4 To provide a range of services designed to satisfy the health, education, social and safety needs of the community's population.

2.1.5 To ensure an adequate supply of housing and building lots to meet the needs of the forecast population.

2.1.6 To provide an efficient, safe and economic street system which maximizes accessibility to all areas within the Springdale Planning Area.

2.1.7 To provide a co-ordinated, convenient and efficient system of utilities.

2.1.8 To accommodate development with a minimal disruption of the natural environment.

2.1.9 To enhance the quality of the natural environment.

2.1.10 To provide a range of recreational facilities designed to meet the needs of the community.

2.1.11 To provide the municipal services and facilities within the financial capabilities of the community.

2.1.12 To maintain a compact development form.

2.1.13 To ensure that development is compatible with the future development and operation of the air facilities within the Springdale Planning Area.

2.1.14 To support the development of the mining, agriculture and forestry activities in the rural part of the Planning Area.

SECTION 3 - DEVELOPMENT CONCEPT

3.1 Present Development Pattern

Springdale has developed from the water side of the community along a narrow terrace of land fronting on Hall's Bay. As more land was required, the Town expanded inland along the shores of Indian Brook and eastward along Halls Bay.

The major commercial activity centre in the Town is focused on Main Street near the Town Hall, while the schools and major recreational areas are located near Grant Collegiate and along the Little Bay Road.

Industrial activities, while dispersed throughout the Town, are becoming more and more prevalent on the Little Bay Road between Main Street and the Industrial park.

3.2 This Plan's Development Concept

Map No. P-1 shows graphically the development concept which is intended by this Plan. Urban development will be permitted within the urban development boundary as indicated on the Future Land Use Plan. The rural area outside this boundary will be available for resource utilization, i.e. agriculture, forestry, mining, outdoor recreation, cottaging and water supply purposes.

Within the urban development area, there will be a single town centre and efforts will be made to ensure that downtown Springdale remains the focus of the region and town wide retail commercial and personal service activities.

The areas of the community which are predominantly residential to the west and east end of the town centre will continue as such. It is the intention that schools, recreational areas, and commercial activities which serve the residential areas will be permitted as

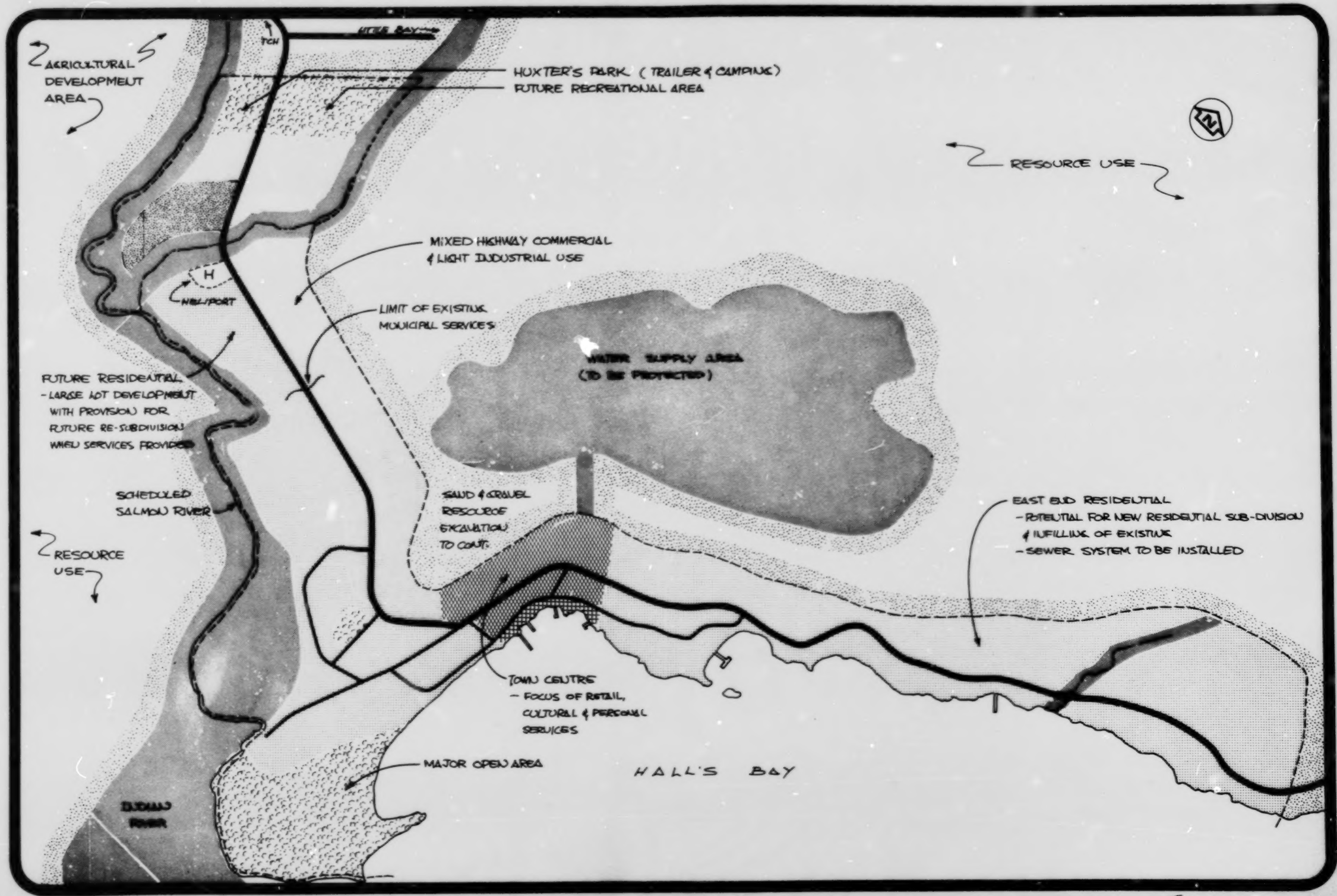
part of the residential environment.

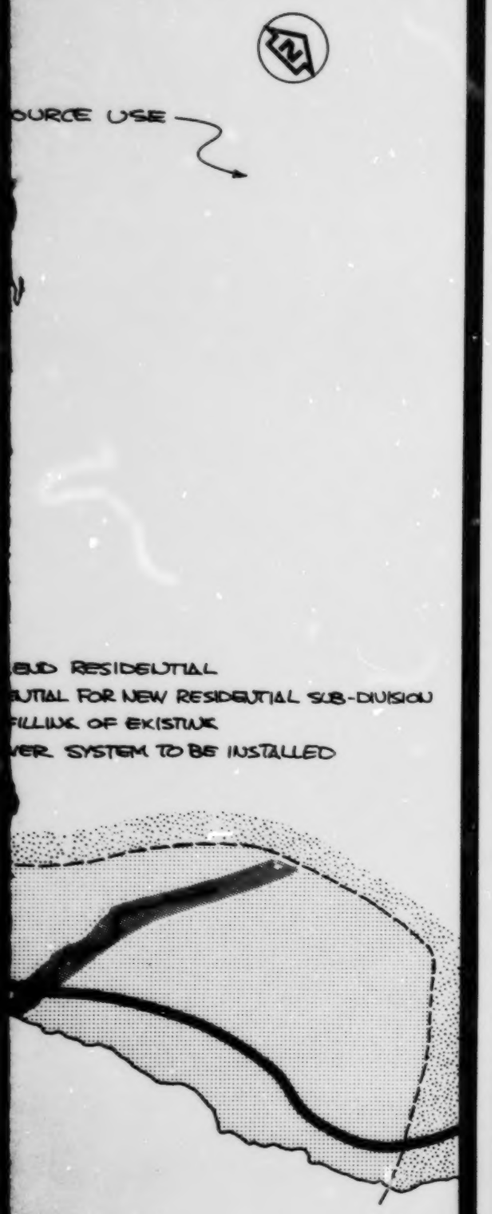
The area on the north side and the existing highway commercial development on the southside of the Little Bay Road are designated for a mixture of highway commercial and light industrial uses. In general, industrial uses should be developed in the new industrial park and certain industrial uses that are located in residential and town centre areas should, in the long run, be located in this facility.

It is important that the traffic carrying capacity of the Little Bay Road and Main Street be maintained. Consequently, new development on the arterial roads should be from either collector streets or from the Little Bay service road. Sand and gravel extraction is expected to continue in the existing operation near the junction of Main Street and Little Bay Road.

With respect to the rural part of the planning area, it is the intention of the Planning Authority that the agricultural development area will be maintained free from residential development and other uses which will destroy this scarce resource. The water supply area will be protected as will the areas adjacent to the streams such as Indian Brook which is a scheduled salmon river.

While not shown on Map P-1, it is the intention of the Planning Authority that seasonal residences will be permitted on Davies Pond and at West Bottom. Route 390 from the junction of Little Bay Road to the Trans Canada Highway will be a protected road as will Route 391 within the Planning Area. This is done to discourage the creation of a ribbon form of development which is expensive to service and reduces the traffic carrying capacities of the access roads to the community.


AGRICULTURAL DEVELOPMENT AREA
TCH
HUXTER'S PARK (TRAILER & CAMPING)
FUTURE RECREATIONAL AREA
RESOURCE USE
MIXED HIGHWAY COMMERCIAL & LIGHT INDUSTRIAL USE
H
HELIPORT
LIMIT OF EXISTING MUNICIPAL SERVICES
WATER SUPPLY AREA (TO BE PROTECTED)
FUTURE RESIDENTIAL - LARGE LOT DEVELOPMENT WITH PROVISION FOR FUTURE RE-SUBDIVISION WHEN SERVICES PROVIDED
SCHEDULED SALMON RIVER
SAND & GRAVEL RESOURCE EXCAVATION TO CONT.
RESOURCE USE
EAST END RESIDENTIAL
- POTENTIAL FOR NEW RESIDENTIAL SUB-DIVISION & INFILLING OF EXISTING
- SEWER SYSTEM TO BE INSTALLED
TOWN CENTRE
- FOCUS OF RETAIL, CULTURAL & PERSONAL SERVICES
MAJOR OPEN AREA
HALL'S BAY
SUSWAP RIVER



DEVELOPMENT CONCEPT
TOWN OF SPRINGDALE
NEWFOUNDLAND

MUNICIPAL PLAN 1982

TOWN CENTRE

MARINE INDUSTRIAL

MIXED HIGHWAY COMM. & INDUSTRIAL

INDUSTRIAL PARK

RESIDENTIAL

PARKS & OPEN SPACE

RESOURCE USE

RESOURCE PROTECTION

COLLECTOR ROADS

ARTERIAL ROADS

URBAN DEVELOPMENT LIMIT

DeLCan DE LEUW CATHER CANADA LTD
CONSULTING ENGINEERS AND PLANNERS
ST. JOHN'S, NEWFOUNDLAND

PREPARED BY TPH
DRAWN BY PRM
DATE OCT./82

NOT TO SCALE
DIAGRAM ONLY

MAP Nº. P-1

SECTION 4 - LAND USE POLICY

4.1 GENERAL DEVELOPMENT POLICIES

4.1.1 Services

All development within the Town of Springdale Urban Development boundary capable of being serviced with municipal services which shall include piped water supply, sanitary sewers, all weather roads and adequate storm water drainage.

4.1.2 Apartments

In the case of re-development for high density residential purposes (apartments), Council shall be satisfied that no additional capacity has to be provided in the water or sewer mains to serve such development. If such services are required, then Council will ensure that agreements are entered into between the developer and the Municipality regarding the provision of such additional services.

4.1.3 New Development

The Town will encourage new development to locate within the Urban Development boundary of the Town of Springdale.

In order to prevent potential problems such as pollution of groundwater, it shall be a general policy of this Plan to discourage development in unserviced areas beyond this boundary. Servicing extensions and subsequent development shall be carried out when such servicing is feasible, and if and when such future development areas are within the Urban Development boundary. The Town shall encourage communication with Crown Lands with respect to the disposition of crown land within the Planning Area with the intention of maintaining the integrity of this policy.

4.1.4 Aesthetics

It shall be the policy of Council to ensure, wherever and whenever possible, that the amenities of Springdale are preserved and enhanced. Therefore, efforts shall be made to place all telephone and power distribution lines to the rear lot to control through appropriate regulations the display of advertisement signs, and to replace trees and other landscape materials which, for one reason or another, are destroyed or removed.

4.1.5 Finances

The Town shall, when considering new development, have in mind the financial position of the community and shall attempt to secure and maintain a satisfactory ratio between residential assessment and industrial - commercial assessment.

4.1.6 Existing Land Uses

Some existing uses of land will not meet all the policies set out in this Plan. This situation is recognized and notwithstanding these policies, such uses may be zoned in any regulations in accordance with their present use and performance standards and all other applicable circumstances, provided:

(a) The zoning will not permit any change of use or performance standard that will aggravate any situation detrimental to adjacent complying uses;

(b) They do not constitute a danger to surrounding uses and persons by virtue of their hazardous nature or the traffic they generate;

(c) They do not pollute air and water to the extent of interfering with ordinary enjoyment of property;

(d) They do not interfere with the desirable development, or enjoyment of the adjacent area;

(e) Where the use is discontinued any re-zoning may only take place in accordance with the policies and intent of this Plan.

Where an existing use constitutes a danger, gives rise to pollution or interferes with development, it shall not be so zoned. Furthermore, the municipality will seek means to eliminate the use and may expropriate when sufficient funds are available or assist in whatever way possible in the relocation of the use.

4.1.7 Non-Conforming Land Uses

Any land use existing at the date of adoption of this Plan that does not conform with the land use designations as shown on Schedule "A" and which are subsequently zoned as non-conforming in the Land Use Zoning and Subdivision Regulations, as a general rule, should cease to exist in the long run. In special instances, however, it may be desirable to permit the extension or enlargement of such a non-conforming use in order to avoid unnecessary hardship. It is the intention of this Plan that the extensions and enlargements shall be handled through the use of the provisions of the Land Use Zoning and Subdivision Regulations.

Any application for the extension or enlargement of a use, which does not conform to the zoning regulation (hereinafter called a non-conforming use) and which existed on the date of passing of such regulation shall be dealt with in the following manner:

(a) Council shall determine the feasibility of acquiring the property concerned at the time of application or possibly some future date and of holding, selling, leasing or re-developing the property in accordance with the provisions of the regulations. Special attention will be given to the chances for the re-establishment of the use under consideration in a different location where it would be able to perform and produce under improved conditions in accordance with the policies of this Municipal Plan.

(b) If acquisition at this time does not appear to be feasible, and if the special merits of the individual case make it desirable to grant permission for the extension or enlargement of the non-conforming use, Council may consider permitting the extension or enlargement of the non-conforming use.

(c) Council, before permitting the extension or englargement of a non-conforming use, shall be satisfied that those of the following requirements which are relevant to the specific application for the extension or englargement of the non-conforming use are, or will be fulfilled in order to safeguard the wider interests of the general public:

(i) The proposed extension or enlargement of the established non-conforming use shall not unduly aggravate the situation created by the existence of the use, especially in regard to the policies of the Municipal Plan and the requirements of the zoning regulation applying to the area.

(ii) The proposed extension or enlargement shall be in a similar proportion to the size of the non-conforming use established prior to the passing of the zoning regulations

(iii) An application, which would affect the boundary between areas of different land use designations on Schedule "A" will only be processed under these policies, if it can be considered as a minor deviation permitted without the need for an amendment. Any major variance will require an amendment to the Plan.

(iv) The characteristics of the existing non-conforming use and the proposed extension or enlargement shall be examined with regard to ground and surface water pollution, noise, vibrations, fumes, smoke, dust, odours, lighting and traffic-generating capacity. No amendment to the implementing zoning by-law shall be made if one or more of such nuisance factors will be created or increased so as to add to the incompatability of the use with the surrounding area.

(v) The neighbouring conforming uses will be protected, where necessary, by appropriate architectural design requirements, the provision of areas for landscaping, buffering or scrreening, appropriate setbacks for buildings and structures, devices and measures, to reduce nuisances and, where necessary, by regulations for alleviating adverse affects caused by outside storage, lighting, advertising signs, etc.

(vi) Traffic and parking conditions in the vicinity will not be adversely affected by the application and traffic hazards will be kept to a minimum by appropriate design of ingress and egress points to and from the site and improvement of sight conditions, especially in proximity to intersections.

(vii) Adequate provisions have been, or will be, made for off-street parking and loading facilities.

(d) It will also be the policy of the Municipality to notify property owners in the area of each application for the extension or enlargement of a non-conforming use prior to a final decision on the matter in order to obtain the view of such property owners.

4.1.8 Maintenance and Occupancy Regulation

It is the policy of Council to encourage the maintenance of the community as a pleasant environment for living, working, shopping and recreation. Continued maintenance of property is essential to the welfare of the Town.

It is the intention of the Council to support the private efforts of property maintenance and to eliminate any existing hazards to building occupants through the use of by-laws specifying standards for all properties within the Town for property maintenance and occupancy under Section 71 of the Urban and Rural Planning Act.

The Council will endeavour to further support property maintenance and safe occupancy by:

(a) Utilizing available government programs where applicable to provide financial and administrative support.

(b) Undertaking education and public relations programs as needed to demonstrate the benefits of property maintenance.

(c) Maintaining municipally-owned buildings and properties and community facilities, and providing or maintaining in good repair such municipal services as roads, sidewalks, water and sewage facilities.

(d) Adopting and maintaining in force, and in an up-to-date manner, an Occupancy and Maintenance Regulation.

4.1.9 Public and Institutional Uses

Except as specifically provided elsewhere in this Plan, public utilities and other public, community, institutional or quasi-institutional uses which provide services to the general community shall be permitted in all areas within the urban development boundary as designated on Schedule "A", provided that:

(a) such use is necessary in the area, that it can be made compatible with its surroundings, and that adequate measures are taken to ensure this compatibility;

(b) adequate off-street parking is provided;

(c) the erection of permanent buildings shall be limited and generally discouraged in areas designated as Resource Protection areas, and

(d) General Development Policies of this Plan, particularly Site Plan requirements, shall be satisfied.

Notwithstanding the power of Provincial agencies or local Boards as defined in the Urban and Rural Planning Act to undertake public works by authority granted under other statutes, the Council shall endeavour to ensure that such development as may take place will follow the general intent of the Plan and will be compatible with the type, quality and character of the land area in which it is proposed.

4.1.10 Accessory Uses

Wherever a use is permitted in a land use classification, it is intended that uses, building or structures normally incidental, accessory or essential to that use be also permitted. This shall include accessory residential uses for non-residential uses.

4.1.11 Home Occupations

Subject to existing regulations, and any further regulations relating to specific subdivisions, home occupation uses shall generally be permitted as an accessory use in conjunction with permanent residential development and shall be appropriately regulated to ensure that they are compatible with surrounding uses.

4.1.12 Site Plan Control Agreements

Council will require Site Plan Control prior to issuance of a building permit. This will be applied to the following uses located within the Springdale Planning Area:

High Density Residential - (apartments, townhouses, etc.)
Commercial
Industrial

Site Plan Control may also be applied to other uses such as Public Uses. Assistance in the preparation and review of Site Plan Agreements should be sought from either the Provincial Planning Office or a qualified planning consultant. Site Plan Control Criteria is located in Appendix "A".

4.2 Residential

4.2.1 Residential Land Allocation

Based on the analysis of the future population using an oil related scenario and a no-oil related scenario, the Town of Springdale would require no more than 10 ha of land be developed for residential use over and above the land that is currently designated residential but remains undeveloped.(46.9 ha.) While this amount of land is small in comparison to the potential residential land that could be developed in either the east or west end of the town, the land use designations in this plan are made on the basis of what is thought to be the best long term use of the land. Control of development of this land is then achieved by servicing requirements.

4.2.2 Policies

Residential shall mean that the land in the areas so designated shall be predominantly used for residences of all types. In addition, other uses which are complementary to the proper functioning of any residential area shall also be permitted. These shall include schools, parks, churches and public utilities where they are compatible in residential areas provided that steps are taken to protect the residential amenities of the area, (i.e. provision for increased setbacks, landscaping buffering for off-street parking where appropriate, etc.).

4.2.3 Multiple Dwelling Units

It is the general policy of this Plan to encourage multiple residential structures, including apartment buildings and row houses, to be in close proximity to the major commercial areas.

Multiple dwelling residential structures will also be permitted in other residential areas of Springdale, upon approval by the Council, so long as they are compatible with surrounding uses and have direct access to a collector street.

Prior to permitting apartment development, Council will ensure that adequate municipal services are available or will be provided. In addition, consideration will be taken of the adequacy of neighbourhood facilities and on-site amenities such as landscaping and play areas, the avoidance of traffic congestion and danger to pedestrians, and the compatibility of the proposed use with its surroundings. Adequate on-site parking shall be required to ensure that resident and visitor parking is available on the lot.

4.2.4 Mobile Homes

All mobile homes will be located either in a mobile home park or a mobile home subdivision.

Mobile home parks intended as an addition to the permanent residential component of the Town should be integrated with residential types of land use. In planning for this type of development similar considerations should apply as for single family dwellings. These include:

- adequate lot size, frontages and setbacks, etc.;
- provision of services;
- dedication of roads to municipality;
- adequacy and proximity of schools, parks and shopping facilities

A site plan agreement will be required for each such development. Any mobile home park shall not be located closer than one kilometre (0.6 miles) from another such development. The establishment of new mobile home parks and subdivisions shall require an amendment to the Zoning Regulation and must be developed according to the Newfoundland and Labrador Mobile Home Development Regulations currently in force.

4.2.5 Large Lot Residential

The area to the west of Charisma Collegiate and between the Little Bay Road and the Resource Protection areas alongside Davis Brook and Indian Brook as well as a small piece of land west of Huxter Park in between Indian Brook and the Little Bay Road is designated for large lot single detached residential units. Development of these lands will be permitted upon the preparation of a development scheme for the area which takes into consideration that in the long run it may be possible and desirable to provide piped sewer and water services.

The development scheme should provide for the initial development on large lots of no less than .4 ha in areas with the frontage set and the building situated in such a manner that when services are provided, one or more lots can be resubdivided (See Appendix B for sample) to increase the density. Development of these lands is constrained by the presence of an explosive magazine as well as a helipad. Furthermore, the necessity to ensure that the traffic carrying capacity of the Little Bay Road is maintained requires that access to the site be limited and that an internal circulation pattern be developed within the site. Actual development of individual sites depend on the approval of the building lot for on-site sewer services under the regulation of the Department of Health.

Furthermore, it is a policy of this Plan that development of the municipal services, will be provided at the cost of the developer, and that when services are upgraded, i.e., piped water and sewer or other municipal services are provided they will be charged for on a local improvement basis to ensure that these costs will not have to be borne by the rest of the community.

4.3 Town Centre Policy

4.3.1 General Intention

The general intention of designating a Town Centre district is to provide a mixed land use area which respects the existing uses, as well as providing for a maximum amount of flexibility with respect to future development.

4.3.2 Land Allocations

Schedule A designates the Town Centre District. Its boundaries are defined in relation to the Marine Industrial Area, the steep escarpment, the East End Residential District and the junction of the Little Bay Road and Main Street. Most of the Town Centre is built up. However, there is potential for re-development of significant amounts of land, i.e., two examples are the school site and the Esso Bulk plant sites.

4.3.3. Town Centre Land Use

Town Centre uses comprise the full range of commercial uses including retail sales, personal and professional services, trades and crafts, commercial recreation and entertainment, automobile uses (not including scrap yards), hotels, wholesaling and quasi-manufacturing uses such as custom workshops (tailor, bakery, shoe repair shop etc.) and printing establishments, communications and transportation services, government offices and private clubs together with parking and other accessory or supporting ues, as well as dwellings attached to business premises. Such dwelling units, however, shall only be permitted in the upper stories of new development. Multiple unit residential uses will be permitted as well.

4.3.4 Non-Commercial Uses

Certain non-commercial uses will also be permitted, such as Public Land uses, i.e., libraries.

4.3.5 Buffering

Adequate buffering shall be provided between the Town Centre use and adjacent residential uses. Such buffering will include the provision of grass strips and appropriate planting of trees and shrubs.

4.3.6 Development of Existing Town Centre Areas

It will be the policy of the Town to encourage by all possible means the development, re-develcpment and visual improvement of the existing Town Centre Area. Such means can include the following:

(i) The Town will examine the opportunities available for funding for downtown improvement projects.

(ii) The Town may co-ordinate, by Businessmen's or other Associations, such things as signs, fascias, lighting, landscaping and general maintenance. All such visual improvements could be incorporated under a common theme. Effort can be made to use small spaces for such amenities as benches and planting and by the improvement of the design of street lighting and other furniture.

(iii) Sufficient space should be provided, and lanes improved, for off-street loading and deliveries to businesses.

(iv) Growth of the existing Town Centre Area shall occur primarily by infilling and redevelopment to keep development compact and avoid infiltration of adjoining neighbourhood areas.

(v) The Town shall investigate the possibility of having a detailed plan prepared for the improvement of the visual environment of the existing Town Centre.

4.4 Shopping Centre Policy

Shopping centres are a land use that requires particular attention and shall have a separate designation in this Plan. A shopping centre means an area of at least 6,000 square metres of land, planned and controlled as a unit containing such retail stores, offices and service shops and other establishments as permitted by the Zoning By-law in an unitary type of building or buildings at least 1,500 square metres in size together with at least 3,000 square metres of customer parking area and at least 1,200 square metres for circulation, service and planting.

Shopping centres shall be permitted in areas designated as such provided the site is of sufficient size to accommodate this type of development. Furthermore, the granting of a permit to develop a shopping centre will be contingent on the developer providing a market study which indicates that the scale of development proposed will not adversely affect the existing retail outlets in the Springdale Planning Area.

While recognizing that proposals for this type of land use are a possibility, this plan does not designate a site for such use at present. Consequently, the development of a shopping centre will require an amendment to the Municipal Plan.

4.5 Neighbourhood or Local Commercial Use

4.5.1 Allocation

This plan designates the existing neighbourhood or local commercial properties as such. In future, the development of this type of use will follow the policies of this plan.

4.5.2 Land Use

Neighbourhood or local commercial uses will be permitted in residential areas provided that they are clearly compatible with the residential environment and are only permitted by way of an amendment to the Zoning and Subdivision Regulations.

4.5.3 Grouping of Neighbourhood or Local Commercial Uses

It is a policy of this Plan to discourage the indiscriminate location of single commercial uses and wherever possible to encourage grouping.

4.5.4 Location

In order to protect the commercial viability of each location, neighbourhood or local commercial sites shall be separated by at least 1.0 km and shall abut a collector roadway.

4.5.5 Access Points

Access points to and from the road shall be limited to curb ramps at selected points and shall be limited in number.

4.5.6 Parking

Off-street parking shall be provided in an amount adequate to serve the specific use.

4.5.7 Screening

Adequate screening shall be provided between the Neighbourhood or Local Commercial use and any adjacent residential uses. Such screening will include the provision of grass strips and appropriate planting of trees and shrubs.

4.5.8 Lighting

Lighting poles and other surface utilities shall be carefully sited and advertisement shall be in keeping with good design and highway safety practices in order to maintain the appearance and safety of the area.

4.6 Mixed Highway Commercial and Light Industrial

4.6.1 Rationale

It is the intention of this Plan to recognize the need for space to develop commercial uses which are dependent upon vehicular traffic and which rely heavily upon such traffic for their economic existence. Other commercial use may be permitted which, due to their nature and operating requirements, would be offensive in a pedestrian-orientated commercial environment such as a Town Centre.

Two types of highway commercial/light industrial land use are envisioned. The zoning and subdivision regulation should provide for the highway commercial uses aimed at serving and travelling public. This type is similar to the uses found along the Little Bay Road to the east of the Vocational School. (i.e., hotels, motels, restaurants).

The second type of highway commercial/light industrial should provide for an expanded use list that would permit the development of commercial activities that are unsuitable in a pedestrian-orientated environment such as building supply centres, commercial sport and recreation establishments (i.e., bowling alleys), and also light industrial uses which require large areas of fenced in storage space for equipment, or which involve clean, non-polluting assembly or manufacturing.

While offices will be permitted, no residential dwelling units shall be permitted other than quarters for a watchman, caretaker or other such necessary personnel.

4.6.2 Land Allocation

Land along the Little Bay Road has been designated as Mixed Highway Commerical/Light Industrial. this reflects the existing situation which exists at present. In general, all uses, with the exception of the bolt factory, conform to the intention of this designation.

4.6.3 Access Points

Access points to and from the road shall be limited to curb ramps at selected points and shall be limited in number.

4.6.4 Parking

Off-street parking shall be provided in an amount adequate to serve the specific use.

4.6.5 Screening

Adequate screening shall be provided between these uses and any adjacent residential uses. Such screening will include the provision of grass strips and appropriate planting of trees and shrubs.

4.6.6 Lighting

Lighting poles and other surface utilities shall be carefully sited and advertisement shall be in keeping with good design and highway safety practices in order to maintain the appearance and safety of the area.

4.7 INDUSTRIAL

4.7.1 Land Allocation

Industrial land use occurs at various locations within the community and an industrial park is located near the junction of Indian Brook and Davies Brook. Sufficient land has been allocated for industrial uses at present. Industrial activities such as the Esso Bulk Plant and the bolt factory should be encouraged to locate in the industrial park.

4.7.2 Land Use

Industrial uses include warehousing, manufacturing and storage uses. Commercial uses incidental to industrial operations or suitable to an industrial areas such as service stations and garages, restaurants, custom workshops, truck terminals, printing establishments, dairies and bakeries may be included.

Retail food stores and other commercial uses intended primarily to serve residential areas will not be permitted.

No residential dwelling units shall be permitted other than quarters for a watchman, caretaker, or other such necessary personel.

4.7.3 Parking

Adequate off-street parking and off-street loading facilities shall be provided by each industrial use.

4.7.4 Protection of Surrounding Areas

In order to protect the amenity of residential areas, the following measures will be necessary:

(a) The routing of heavy trucks or other vehicular uses along roads designed and located for the easy and safe movement of heavy traffic. These routes, where possible, shall not pass through residential areas.

(b) The provision of adequately landscaped and maintained buffer strips where industrial uses abut residential uses.

4.7.5 Non-Serviced Industrial Development

The economical well-being of most municipalities depends to a large extent upon the maintenance of a reasonable balance between residential and non-residential assessment. It is also important to provide a reasonable amount of encouragement to the latter type of development. Notwithstanding Sections 4.1.1 and 6.1, industrial uses not requiring the construction of municipal services will, therefore, be permitted subject to approval of the Department of Health.

4.7.6 Marine Industrial

A Marine Industrial designation has been made on Schedule "A". This will provide for industrial uses which require water frontage such as the boat building facilities. Businesses which have a marine orientated nature but which do not require water frontage shall be located in the appropriate industrial area.

4.8 PARKS AND OPEN SPACE

4.8.1 Location and Allocation

Parks and Open Space have been allocated to serve the recreational needs of the residents of the Town. When compared with the national standards for the provision of spaces for parks, Springdale is well off. However, the location of parkland and its level of development should be improved.

At a minimum, Council shall attempt to provide a playing field in the east end of the town in addition to the small playground which exists at present.

With respect to the large amount of open space designated at the junction of the Indian River and Halls Bay, it is proposed that a parking lot and access to the site be developed at or near the end of Main Street and that the area be developed with hiking trails which could possibly have as a destination a look-out over the Bay. This is seen as being a long term project.

4.8.2 Land Use

Parks and Open Space shall mean those lands, in either public or private ownership, which are used primarily for active or passive recreation.

Lands designated as Parks and Open Space shall be kept free of buildings and structures, except for a minor proportion of the area on which those buildings or structures, necessary to serve the use of the area may be erected.

Cemeteries shall be permitted as a special use in this category because of their open character.

4.8.3 Dedication

Where new development is proposed on a site which includes areas designated for Open Space because of physical or environmental hazards, such hazard lands shall not necessarily be acceptable as part of the 5% dedication of land for public purposes, provided for in the Urban and Rural Planning Act. All Open Space lands dedicated to the municipality under subdivision procedures or site plan agreements shall be conveyed in a satisfactory physical condition, and , if an open watercourse is involved, the dedication shall provide sufficient area of land for proper maintenance operations to be carried out.

4.8.4 Redesignation

If application is made to the municipality to change the designation of Open Space lands, the municipality will first determine if the land is required for public purposes and if it can be purchased by the municipality or other public agency. If the land is not to be purchased, then the municipality may give consideration to the proposed amendment to the Plan after taking into account:

(a) the situation respecting any existing physical and/or environmental hazard and the potential problems which might arise by changing the Plan, and

(b) the proposed methods by which these problems may be overcome in a manner consistent with accepted engineering practice and resource management techniques.

4.8.5 Private Ownership

Where any lands designated for Open Space are under private ownership this Plan does not indicate that this land will necessarily remain as Open Space indefinitely, nor shall it be construed as implying that Open Space areas are free and open to the general public or will be purchased by the municipality. If proposals to develop any such lands that are in private ownership are made and the municipality does not wish to purchase such lands in order to maintain the

Open Space, then an application for the re-designation of such land for other purposes will be given due consideration by the municipality.

4.8.6 Park Standards

The park standards recommended in the Plan are as follows:

(i) Local Parks

1 hectare (2.5 acres) per 1,000 population. These parks are for active recreation purposes and should be convenient to any residential area. School playgrounds can be included for these purposes.

(ii) Community Parks

1.2 hectares (3.0 acres) per 1,000 population. These parks are intended for both active and passive recreation carried out on a community wide basis.

(iii) Regional Parks

4 hectares (10.0 acres) per 1,000 population. These are intended to be large areas retained basically in a natural state and not necessarily located within the community, but easily accessible.

4.8.7 Cash in Lieu

For new developing areas, land requirements for neighbourhood parks would ordinarily be obtained as part of the land for public purposes required from subdivisions under the Urban and Rural Planning Act. However, should any subdivision be too small, thereby making it difficult to obtain sufficient tracts of good land for park purposes, the Town shall accept cash payments in lieu of conveyance of land. Such monies shall be used for acquiring sufficient park sites or for other such purposes as specified in the Urban and Rural Planning Act.

4.8.8 Cemeteries

Cemeteries are an essential land use in the community. They also provide a sacred form of open space within the municipality. Seven cemeteries are located within the Springdale Planning Area. Three of them are unused. Four are currently in use and are considered to have sufficient space for the duration of the planning period. In respect for this type of land use, it is a policy of Council to ensure that the cemeteries are well maintained and that they are protected from incompatible adjacent land uses.

4.9 PUBLIC USE

4.9.1 Land Allocation and Location

Public uses such as schools and churches, senior citizen institutions or a nursing home, under either public or private ownership may be permitted within or in close proximity to the Town Centre and the Residential Areas of Town. These uses shall be encouraged to locate within the core of the community or within reasonable proximity to community services (commercial, cultural, social and entertainment) to provide residents with easy walking distance access to such services. Social clubs shall be located in the Town Centre or in Commercial areas and shall not be permitted to locate in proximity to residential areas.

4.10 AIR TRANSPORTATION USES

4.10.1 Location and Allocation

Schedule A shows the location of the Air Transportation uses. Each of these facilities is important to the future of Springdale. Consequently, development of areas surrounding each of the facilities must be carried out in a manner which will not adversely affect the safe and economic operation of these facilities.

4.10.2 Development Controls - Airstrip

It is recognized that there is a conflict between the airport land use and farm land which is currently being used.

In order to keep the option open to ensure that the airstrip is available for use in conjunction with the Halls's Bay Platform Construction Site, an area of approximately 100 m wide and 1 000 metres in length should be kept clear of building and other structures. This will allow the use of Twin Otters which are currently being used by Labrador Airways.*

4.10.3 Development Controls - Helipad

A helipad is presently under construction in the location shown on Schedule A. Lands adjacent to the site are designated for residential use. In order to allow the safe and economic operation of the helipad, the Zoning and Subdivision Regulation shall indicate the area that must be kept free of obstacles.

*This section was reviewed with Mr. Simmons of the Provincial Air Services and reflects the essence of the conversation.

4.10.4 Development Controls - Seaplane Base

A seaplane base is in operation on Davis Pond. Approximately 1,800 metres of obstacle free water of sufficient depth is required to provide a landing surface. Furthermore, as this is an unlicenced landing facility, the planes must maintain an altitude of approximately 300 metres above populated areas on their approach. For the purpose of this plan, this will require that no development occur along the shore of Davis Pond at either end. This will be a constraint to development of cottages proposed elsewhere in this plan. However, it will leave the option open to allow the seaplane base operator the opportunity to be licenced in the future as well as providing a safe and obstacle free approach to the water. However, it will still leave the potential conflict between the seaplane operators and the cottage users.

4.10.5 Development Control By Other Governments

While the Town of Springdale is unable to exert direct control over the activities of the senior governments, it shall endeavour to convince the relevant authorities that when development related to airport use occurs throughout the Springdale Planning Area, it should be:

(a) made compatible with its surroundings, and adquate measures should be taken to ensure this compatibility;

(b) adequate off-street parking should be provided; and

(c) the General Development Policies of this Plan, particularly site plan requirements, should be satisfied.

Notwithstanding the power of Federal, Provincial and other agencies to undertake public works by authority granted by other statutes, the Council shall still endeavour to ensure that such development as may take place will follow the general intent of the Plan and will be compatible with the type, quality and character of the land area in which it is proposed.

4.11 RESOURCE LANDS

4.11.1 Introduction

The land outside the Urban Development Boundary is shown on Schedule "A". At present, it contains a variety of activities, i.e. forestry, industry, pulpwood and domestic wood supply cutting, logging and sawmilling, see Map 4.2. As well, there is a large area which has been designated as the Springdale Agricultural Development Area. It is understood that while designated as such and shown in the Province's Land Use Atlas, the regulations implementing it have not been passed.

The rural part of the planning area is also the site of the Springdale Municipal Sanitary Land Fill, an explosives magazine, the Department of Transportation's Salt Sheds and Bunkhouse, two airports, two recreational parks and a scheduled salmon river. In addition, the rural area contains the existing water supply area for the town.

4.11.2 Categories of Land Use

The land outside the Urban Development limits is mainly of two categories - Resource Utilization and Resource Protection. The land, as in previous plans is to remain largely undeveloped.

4.11.3 Resource Protection Lands

The intention of this land use category is to protect the natural drainage system of the planning area. This is important in that the streams, ponds and Halls Bay and its tributaries provide a natural drainage system that can be used to economically channel storm drainage. If the banks of the watercourses are disturbed there is a risk of erosion and the transportation of such material through the streams and into the ponds and lakes with the possibility of harmful effects to the aquatic environment.

In addition, the streams are important in recharging the underlying water tables or aquifer that are important in supplying high quality water. Furthermore, Springdale has a scheduled salmon river which is a particularly valuable resource.

For these reasons, land located within 10 m of the banks of the streams in the Springdale Planning Area shall be kept free from development.

In addition, land located within 15 m of the banks of Halls Bay and all ponds in the Springdale Planning Area shall be kept free from development. However, merchantable timber can be harvested by selective cutting means.

Land in this category shall be kept free of buildings and structures, except for a minimum proportion of the area on which those buildings or structures, necessary to serve the use of this area, may be erected.

Cemeteries shall be permitted as a special use in this category because of their open character, and these lands may be used for passive recreation.

4.11.3.1 Water Supply Areas

Huxter's Pond and Sullivan's Pond are the existing source of water supply for the town. Neither are legally designated as being the water supply area. Council will take the steps necessary to have the Department of the Environment designate these areas as water supply areas.

4.11.4 Resource Utilization

4.11.4.1 Agricultural Area

The Springdale Agricultural Development Area includes in some of its territory the western part of the incorporated Town of Springdale. This area contains an existing park - Huxter Park, the Industrial Park and Atlantic Analytical Services. It also contains the site of the proposed Springdale Helipad which will be constructed by the Department of Transportation. Because of the existence of these substantial amounts of non-agriculture land use, the boundary of the Agricultural Area as shown on Schedule "A" is set so that it coincides with the municipal boundary near the junction of Routes 390 and 391.

Schedule A shows the lands that are considered of importance for Agricultural Development. Some of these lands are actively being farmed while others are either dormant or forested. Certain non-agricultural uses are located in the area, such as an explosives magazine, the Department of Transportation maintenance depot and gravel pit and the Springdale Airstrip.

While these lands are to be used primarily for agricultural purposes, residences and other developments ancillary to the agricultural use shall be permitted, subject to the Protected Road regulation, the control area around the sanitary land fill site, the explosives depot and the space provided to allow enlargement and further development of the airstrip.

Furthermore, part of the Agricultural Development Area is underlain by high quality sand and gravel. It is a policy of this plan that access to this resource be maintained subject to agreement between the Department of Agriculture and the Department of Mines and Energy as to an operational plan for its extraction and ultimate reclaimation of the site. Furthermore, the extraction of sand and gravel will be subject to the requirements of this plan.

Finally, until such time as a plan is adopted for the Agricultural Development Area, forestry activities are permitted.

4.11.4.2 Municipal Sanitary Land Fill

The Municipal Sanitary Land Fill is shown on Schedule A. A distance of 1.6 km surrounding the site is to be kept free from development.

4.11.4.3 Seasonal Residences

This plan proposes two areas for seasonal residences, Davis Pond and the shores of Halls Bay between West Bottom and Indian Brook. As crown land is generally unavailable for cottage lot development within a planning area unless the area is designated as such, it is the intention of this Plan that the Dept. of Forest Resources and Lands permit seasonal residential development at these locations.

It is the intention of this plan, that an appropriate plan for seasonal cottage development on Davis Pond be prepared respecting the acquired rights of the existing seaplane base operation and according to the policies of this plan and the relevant crown lands guidelines.*

It is also the intention of this plan that remote cottages in the rural part of the Planning Area be permitted on lands that have already been granted by the Crown subject to the provisions of the Department of Health for the installation of septic tanks and the provision of the Newfoundland Department of Forestry and Agriculture.

* Recreation Cottage Planning Guidelines
Compiled by the Land Management Division
Newfoundland Department of Forestry and Agriculture

4.11.4.4 Forestry and Mining Lands

The balance of the planning area is largely used for forestry purposes. Several areas are being reforested and the cutting of saw logs, pulp and firewood is being carried out. It is a policy of this plan that these lands be used for agriculture, forestry and mining operations and that only development ancillary to these activities be permitted.

4.12 Aggregate Extraction

4.12.1 Allocation

This plan designates two sites which have aggregates of high economic significance. Both of these sites are adjacent to the Little Bay Road. Access to these resources should be maintained; therefore, a 30 metre access to each is shown on Schedule A.

4.12.2 Land Use

Aggregate extraction use shall mean extraction by means of pits and quarries as well as associated uses such as aggregate storage, stone crushing plants, concrete batching plants, asphalt batching plants and accessory uses.

4.12.3 Permitted Uses

Land designated "Aggregate Extraction" on Schedule "A" shall be reserved and used for the purpose of mineral extraction and related uses described in 4.12.1 except that it shall be a policy of this plan to require the implementing zoning regulation to recognize as permitted uses all uses existing as of the date of passing of the by-law. Other new uses which will not preclude the future use for mineral extraction of lands designated "Aggregate Extraction" shall be permitted. Forestry, open air recreation and agriculture are examples of such permitted uses.

4.12.4 Wayside Pits and Quarries

However, not withstanding any other provisions of this plan, any public road authority or its agent may use the lands designated as Agricultural, Aggregate Extraction and Forestry and Mining areas for wayside pits and quarries provided that the planning authority is consulted and concurs in this matter prior to the commencement of the extraction and processing operations.

4.12.5 Development Agreement

It shall be a policy of this Plan that an applicant requesting a zoning amendment wishing to undertake an extractive operation will be required to enter into a development agreement with the municipality prior to Council's enactment of the necessary amendment. Such an agreement shall include the following:

(a) routes to be used by trucks going to and from the pit or quarry;

(b) arrangements for a tree screen and/or earth berm providing an effective visual buffer between any proposed excavations and any road, including unopened road allowances and any abutting area designated in the official plan for residential or village community uses;

(c) provisions that the hours of operation in connection with a pit or quarry shall be restricted to certain days of the week and for a specified period of time each day;

(d) provision that no new excavation or other processing shall take place until such screening has been established to the satisfaction of the municipality;

(e) provision that no polluted water from washing or screening operations shall be discharged into any brook or watercourse.

4.12.6 Rezoning Application

An application for rezoning for purposes of mineral extraction shall be accompanied by two copies of the site plan and all other information included in a licence application required by the Department of Mines and Energy under the Quarries Materials Act and all Regulations made under the Act.

4.12.7 Guidelines

In considering an application for rezoning and a development agreement, the following guidelines will be among the matters considered by the municipality:

(a) in order to preserve the scenic beauty and amenity of the area, extractive operations will generally be restricted to areas not exposed to public view;

(b) extractive operations will generally be prohibited:

(i) in the case of the removal of sand and gravel within approximately 100 metres of any adjoining property designated for residential purposes by the plan;

Where a proposed extractive operation borders on other uses, council at its discretion may require that the buffer area of 100 metres shall also apply;

(ii) in the case of the removal of quarry stone or in the processing of sand, gravel or stone at the extraction area within approximately 100 metres of any adjoining property designated for residential purposes by this plan;

Where a proposed extractive operation borders on other uses, Council at its discretion may require that the buffer area of 100 metres shall also apply.

(c) no pit or quarry shall be excavated so that the top edge of the excavation is at a point less than 15.0 metres from the limit of any road right-of-way and 15.0 metres from any adjoining property line.

All approvals will be granted with reference to a specific site plan.

4.12.8 Approval by Department of the Environment

All extractive industrial uses must satisfy the requirements of the Department of the Environment as to water supply, waste water, solid and liquid waste disposal and air and noise pollution control.

Pumping, dewatering and the taking of water will not be permitted in any pit or quarry unless approval is obtained from the Department of the Environment as applicable.

4.13 EXPLOSIVES STORAGE AND DISTRIBUTION

4.13.1 Allocation and Location

Two sites are used for the storage of explosives. One is in the Agricultural Area and the other is located in the future Residential area on Little Bay Road. See Existing Land Use Map.

This type of operation requires a large amount of land for buffering purposes. It cannot locate in an urban area or close to other buildings inhabited by people. An industrial park location is unacceptable as is a location near residential development. A rural location is the best location to meet the site requirements of this industry.

It is the policy of this plan that prior to permitting the residential development along the Little Bay Road that the Explosives Distribution operation be phased out and relocated to a rural site. Consequently, it will become a non conforming use. The site located in the Agricultural Development Area will be designated for the storage only of explosives.

4.13.2 Permitted Uses

The following use is permitted in the Explosive Storage and Distribution Area. A business engaged in the storage and distribution only of explosives shall be permitted and its scale and operation shall be regulated by a site plan agreement, a zoning regulation and the regulations of the Canada Explosives Act, Federal Department of Energy, Mines and Resources. Explosives permitted on the site shall be restricted to authorized commercial explosives under the terms of the Canada Explosives Act.

SECTION 5 - ROADS, TRAFFIC AND PARKING

5.1 RIGHT-OF-WAYS

The Roads Plan is shown on Schedule A. It is inherent in this Plan that the following right-of-ways be required in newly developing areas, and where possible in areas presently built up:

Arterial Road	-	31 metres
Collector Road	-	20 metres
Local Streets	-	Greater than 50% single detached and semi-detached - 15 metres
	-	Greater than 50% row housing and multi-family units - 18 metres
Service Lanes	-	12 metres

5.2 FUNCTIONAL CLASSIFICATION

In order that streets may be designed to properly handle present and future traffic needs, the following functional classification has been used:

A. Urban Arterial Roads

Arterial roads are principal traffic arteries within the urban area. They are intended to provide fast, efficient road connections from one section of the Town to the other. These roads have right-of-way over other streets and as a rule direct access to abutting properties should be restricted. Little Bay Road and the greater part of Main Street are examples of this type of roadway in Springdale.

B. **Urban Collector Roads**

Collector roads are streets which distribute traffic from the arterial roads to various neighbourhood, commercial and industrial areas of the Town. Access to abutting properties is permitted. Cherry Crescent is one example of this type of roadway.

C. **Local Streets**

Local streets are streets which distribute traffic from the collector streets and give access to individual properties.

5.3 DESIGN STANDARDS

The roads in each of these classifications should be designed and constructed in accordance with specific standards determined by the function each street should fulfill. This is especially true of the number and width of lanes and the design of intersections. Projections regarding the use of abutting lands should be made with the functional classification of the road in mind. This will ensure that these land uses will cause no serious interference with the flow of the traffic and the nuisance caused by traffic in turn will be kept to a minimum.

5.4 TRAFFIC IMPROVEMENTS

Suggestions have been made in the past that a one way system of roads in the town centre be established as a means of alleviating traffic congestion. This has been reviewed and it is the view of this plan that significant improvement to the traffic situation will not be achieved by this means. However, it is proposed that if the intersections are re-designed to facilitate the turning of large trucks, and specific truck loading areas are defined, a truck route to the Government Wharf is designated, and the curbside and off-street parking improvements are carried out and enforced, a

significant improvement in the Town Centre traffic situation may be seen.

5.5 TOWN CENTRE ROADWAY AND PARKING IMPROVEMENTS

5.5.1 Policy

Council recognizes that traffic and parking are an important aspect in maintaining a viable town centre. As a result, it is a policy of this plan to carry out the necessary physical improvements to the roadway network as suggested in the Report of Findings. Detailed planning and engineering will be carried out at such time as Council makes the necessary funds available.

5.5.2 Off-Street Parking Policy

This plan recognizes that off-street parking is a necessity in Springdale as most of the businesses draw their clientele from beyond reasonable walking distances. As a result, it is a policy of this plan that Council ensure that an adequate amount of off-street parking is provided in approving new development both in the Town Centre and throughout the rest of the Planning Area.

It is proposed in this plan, that the Town of Springdale develop additional parking in the Town Centre as suggested in the Report of Findings which accompanies this Plan.

5.6 ROUTES 390 AND 391 AS PROTECTED ROADS

It is the intention of this Plan that ribbon development along the provincial highway network which serves the Town not be permitted. Consequently, it is a policy of this Plan that Council approach the Department of Municipal Affairs to have these roads protected from development under the appropriate provisions of the Urban and Rural Planning Act.

5.7 SIDEWALKS

Because of the location of the various schools along Little Bay Road and in the Town Centre, it is essential to have a safe pedestrian network. It is therefore a policy of this Plan that sidewalks will be developed on all arterial roads within the built up areas of town and on other streets according to the warrants for the Provision of Sidewalks, included in Table P.1.

TABLE P.1

WARRANTS FOR THE PROVISION OF SIDEWALKS

WHERE ANALYSIS OF THE NEED FOR SIDEWALKS IS REQUIRED, THEY SHOULD BE PROVIDED ON LOCAL AND COLLECTOR STREETS ACCORDING TO THE FOLLOWING WARRANTS:

WARRANT	VEHICLES PER DAY	PEDESTRIANS PER DAY
S/W REQUIRED ONE SIDE	250 - 1000	150
	1000 UP	100
S/W REQUIRED BOTH SIDES	500 - 1000	500
	1000 UP	300

SIDEWALKS ARE WARRANTED ON MINOR LOCALS ONLY WHEN THE ROUTE FORMS PART OF A PATHWAY TO SCHOOLS OR OTHER ACTIVITY CENTRES. MINIMUM SIDEWALK WIDTHS SHOULD BE NOT LESS THAN FOUR FEET. WHERE LOCAL POLICY INCLUDES MUNICIPAL SNOW REMOVAL, A MINIMUM WIDTH OF FIVE FEET IS RECOMMENDED BASED ON PRESENTLY AVAILABLE EQUIPMENT. SIDEWALKS AND CURBS SHOULD BE DEPRESSED AT STREET INTERSECTIONS TO PERMIT EASY PASSAGE OF VEHICLES, SUCH AS CARRIAGES AND WHEELCHAIRS.

(THIS FIGURE TAKEN FROM RECOMMENDED GUIDELINES FOR RESIDENTIAL SERVICING IN ONTARIO - BY ONTARIO HOUSING ADVISORY COMMITTEE DEC. 1973)

Source: Housing & Urban Development Association of Canada Design Guidelines for Residential Streets Brandon, 1977

SECTION 6 - COMMUNITY SERVICES AND FACILITIES

6.1 SERVICED DEVELOPMENT

It is a policy of this plan that no development shall take place within the Urban Development limits as shown on Schedule "A" unless adequate municipal water, sewer and storm drainage facilities are available to service such development.

6.2 SEWER AND WATER AND STORM DRAINAGE

6.2.1 Master Planning Policy and Interim Measures

This plan recognizes that there is a need to provide an adequate system of services, water supply and storm drainage. It is therefore a policy that Council will have prepared a Master Plan for these systems which will ensure that a co-ordinated, secure and financially viable system is provided. In the interim, as the problem with the provision of sewer systems is much greater than with water systems, because sewer construction is subject to constraints of grade, elevation and the requirement for straight sections between manholes, Map No. 5, which shows the proposed location of sewers and outfalls which will be used to assist builder and developer in formulating acceptable proposals for the approval of Council. This will ensure that the location of new building will not interfere with the future development of these systems.

6.2.2 Water Supply

The existing water supply is adequate to provide for the development foreseen in this plan. As indicated in the section on Land Use, it is a policy of this plan that the existing water supply area be protected under the legislation of the Department of the Environment. Council shall take the steps necessary to obtain this protection.

6.2.3 Development to Occur Below 46 Metre Contour

As the water system operates by gravity flow, Springdale benefits from not having to pay operating and maintenance costs for pumping the water. Therefore, in order to maintain a satisfactory operating pressure for all properties, development on lands above the 46 metre contour will not be approved.

6.2.4 Water System Improvements

The Report of Findings indicates that certain system improvements are necessary. It is a policy of this plan that these proposals be evaluated and priorities set for their implementation.

6.2.5 Fire Flow Policy

This plan recognizes that the current water system, while adequate for existing domestic water supply, falls short of providing the required fire flow in certain parts of the town. Consequently, it is a policy of this plan that Council will strive to provide and maintain a water system which will have sufficient capacity to supply the fire flows which are required for the safety of the community.

6.3 DEVELOPMENT STAGING

In order to conserve the financial resources of the municipality and to allow economical extension of services, development in the Town of Springdale, will generally take place as logical extensions of existing development. As there is sufficient water supply in the east end of town to ensure adequate fire flows for low density development, and the lands in question can be served by gravity services, it is logical that this area should be developed before the west end. Development in the west end is possible. However, it requires the installation of trunk sewer, water and lift stations with their on-going operation and maintenance costs. These costs should be avoided, if at all possible.

6.4 PROVISION OF SERVICES BY DEVELOPERS

It is intended that all new development shall be accompanied by the provision of those essential services by the developer as per specifications set from time to time by Council. Council may also require the provision of some services by a developer even though such works are external to his lands. It will be the responsibility of the municipality to extend services to already developed but only partially serviced areas as local improvements which shall be charged against the land which benefits.

6.5 REVIEW OF DEVELOPMENT PROPOSALS

It is a policy of this plan that future developments will be compatible with the overall servicing plan for the Town and will conform with acceptable standards of engineering and construction. Council should therefore seek the advice of a competent engineer to review development proposals.

6.6 DEVELOPMENT LAYOUTS

Reference to Map 5 of the Report of Findings indicates the proposed location of the future water and sewer lines in the east end. Development of residential lots should conform to the pattern suggested by these proposals. Detailed planning should take place according to the requirements of the Zoning and Subdivision Regulation.

6.7 STORM SEWERS

The major water courses which traverse the Springdale Planning Area are expected to serve in part as the trunk storm drainage system; elsewhere, easements for storm drainage may be required. All roof water or tile drainage systems are to be connected to the storm drainage system rather than the sanitary system. This requirement shall be enforced by the appropriate Regulation which is now in place.

6.8 INSPECTION OF NEW SEWER AND WATER SERVICE CONNECTIONS

This plan recognizes that it is essential to protect the investment in the water and sewer system. Consequently, it is a policy of this plan that all new water and sewer service connections will be installed under a permit system and such installation shall be inspected to ensure that they meet the standards set by the town.

6.9 SERVICES TO THE INDUSTRIAL PARK

At present, the Industrial Park has its own water supply, dependent on pumping from Indian Brook. Ultimately, it will need to be connected to the existing water system which will be extended along Little Bay Road. This will require the development of approximately 1800 metres of trunk sewer and water. As substantial development of the lands adjacent to Little Bay Road is a remote possibility at this time, a source of funding which would cover much of the capital expenditure on this project must be found before construction of such a trunk main is carried out.

6.10 RECREATIONAL FACILITIES

6.10.1 Recreation Master Plan

The major recreational facilities in Springdale are for the most part operated and maintained by the Town of Springdale. Other facilities are also available and, if properly co-ordinated, use of schools, school playgrounds, playing fields and church halls can be of great benefit to the whole community. The preparation of a master plan for recreation, culture and leisure services in the Springdale Planning Area would allow groups and individuals in the community to provide their goals and objectives for input to a plan that would set priorities for these developments. A flow chart describing this process is included in the Report of Findings and it is a policy of this plan that the assistance to carry out this task will be sought from the Department of Culture, Recreation and Youth.

SECTION 7 - IMPLEMENTATION

7.1 IMPLEMENTATION TECHNIQUES

The policies and proposals of the Municipal Plan for the Springdale Planning Area will be implemented by the exercise of:

(i) Land Use zoning and subdivison regulations, under Section 37 of the Urban and Rural Planning Act.

(ii) Preparation of development plans for appropriate comprehensive development areas and a Master Plan for recreation, culture and leisure services;

(iii) Site Plan Control for multiple family residential, commercial, industrial and public uses;

(iv) A planned sequence of Public Works;

(v) The adoption of a building code;

(vi) The adoption of an occupancy and maintenance regulation;

(vii) The application of the Mobile Home Development Regulations currently in force.

(viii) Development Agreements for Aggregate Extraction.

7.2 REVIEW OF LAND USE ZONING AND SUBDIVISION REGULATIONS

The land use zoning and subdivision regulations will be reviewed and adapted to bring them into conformity with this Plan.

7.3 AMENDMENT OF THE MUNICIPAL PLAN BY-LAW

The Municipal Plan is a document which can be altered in the light of the changing needs. The Urban and Rural Planning Act requires that the Municipal Plan be reviewed every five (5) years. However, it may be amended any time within the five (5) year period provided the requirements of the Urban and Rural Planning Act are met. These requirements deal with notice to the people of the community that

the Plan is going to be altered. Amendments to the Plan are sometimes necessary when a policy or proposal or standard in the Plan is not in the best interest of the community as a whole. Amendments which are made to suit individual perference which are not in the best interest of the community make the Plan a weak and ineffectual Plan and shall be avoided.

7.3.1 Zoning Amendments

All amendments to the land use zoning and subdivision regulations will be checked out against the Future Land Use Map (Schedule A) and text of the Plan for the purposes of conformity. This can be done by either the Provincial Planning Office or a professional planning consultant.

7.4 SITE PLAN CONTROL

Many of the land use conflicts associated with multiple family residential, commercial, industrial and public uses can be avoided if sufficient concern for detailed design is incorporated into the development approval process. Council shall require a site plan to be prepared and approved by the Town prior to the issuance of the building permit for multiple family residential, commercial, institutional, and public uses.

Appendix A contains the site plan criteria required for the preparation of a site plan.

7.5 MAINTENANCE AND OCCUPANCY REGULATIONS

At present the Town of Springdale does not have a maintenance and occupancy regulation to apply to the renovation of existing properties and to the provision of a minimum standard of maintenance as well. Council shall adopt these regulations and maintain them in an up to date manner and ensure their enforcement as needed.

7.6 BUILDING CODE

At present the Town of Springdale does not have a building code to specify the minimum standards for new residential and other form of development. Council will investigate the adoption of a building code.

7.7 PUBLIC WORKS

The construction of all public works within the Springdale Planning Area shall be carried out in accordance with the policies of this Plan.

7.8 SEWER AND WATER SYSTEM PROTECTION

In order to protect the substantial investment in the sewer and water system, Council will have developed a system of permits to implement the intent of the sewer and water system regulation.

7.9 COST OF PROPOSALS

This Plan contains several proposals which entail major costs to the Town of Springdale. Planning level cost estimates have been prepared for each of them so that the effect on them can be assessed relative to the Town's ability to pay.

7.9.1 Town Centre Street Improvements

- Street upgrading, curbs, sidewalks etc.		
650 metres at $550/m	=	357,500
Engineering, Financing & Contingency (25%)	=	89,400
Planning Estimate	=	446,900

7.9.2 Sewer and Water System Improvements

- Control & Chlorination Equipment, (Installed price)	=	25,000
Engineering, Financing & Contingency (30%)	=	7,500
Planning Estimate		32,500
- Water flow recorder and reservoir line guages		
Equipment (installed price)	=	16,000
Engineering, Financing & Contingency (30%)	=	4,800
Planning Estimate		20,800
- Completion of Water System Loops		
- Central Area near Poplar 120 metres at $210	=	25,200
- West of Elm 30 metres at $210/m	=	6,300
		31,500
Engineering, Financing & Contingency (30%)	=	9,450
Planning Estimate (say)	=	41,000
- Improvements to Lift Station NO. 1		
- Supply and Install	=	120,000
- Engineering, Financing & Contingency (25%)		40,000
Planning Estimate		160,000

7.9.3	**Water and Sewer System Master Plan**		
	Planning Estimate	=	15,000
7.9.4	**Recreation, Culture & Leisure Services Master Plan**		
	Planning Estimate	=	15,000
7.9.5	**Development Scheme**		
	Large Lot Residential Area on Little Bay Road		
	Planning Estimate	=	12,000
7.9.6	**Provide Sewer & Water to Industrial Park**		
	- 1800 metres along Little Bay Road at $460/metre	=	828,000
	- 1 Lift station	=	75,000
	Engineering, Financing & Contingency (25%)	=	225,750
	Planning Estimate	=	1,128,750

TABLE P-2

COST ESTIMATE SUMMARY 1982 - 87

TOWN OF SPRINGDALE MUNICIPAL PLAN 1982

ESSENTIAL WORKS	
ITEM	COST
Sewer & Water System Improvements	
- Chlorination	32,500
- Recording Equipment	20,800
- Completion of Loops	41,000
- Improvements to Lift Station 1	160,000
Master Plan - Water & Sewer	15,000
Development Scheme (Large Lots)	12,000
TOTAL	281,300

DISCRETIONARY	
ITEM	COST
Main Street Upgrading	446,900
Recreation Plan	15,000
Provide Sewer and Water to Industrial Park	1,129,000
TOTAL	1,590,900

7.10 Budgetary Impact

Cost estimates for the Capital Works for the Town of Springdale are shown in Table P-2 and totals approximately 1.7 million dollars. It is assumed for the purpose of this Plan that the infrastructure for new subdivision development will be self-financing as it is a policy to charge these improvements against the land that will be developed.

For the purpose of this Plan it is assumed that the essential works will be carried out in equal installments over the 1982 to 1987 period.

7.10.1 Impact Assessment

Using the debt charge ratio method which compares the annual cost of principal and interest to the total expenditures of the Town, the following facts are apparent:

> In 1981, Springdale paid out principal and interest of $304,956 to service the long term debt.

The total debt charge ratio, which includes long term sewer and water cost was:

$$\frac{304,956 - 69,700}{739,706} = 31\%$$

The General Operating Fund debt ratio was:

$$\frac{150,597 - 34,800}{739,706} = 15.6\%$$

Based on the above debt charge ratio it is concluded that Springdale is financially healthy, as its general operating fund debt ratio is almost 10% lower than the 25% limit that is considered acceptable in municipal finance circles.

Assuming that the capital requirements for the essential works as shown in Table P-2, will be $58,260. per year for the next five years, and assuming amortization over fifteen years at 17% (available

from the Newfoundland Municipal Financing Corporation) an additional $3,120 per year in principal and interest will be added to the existing expenditures to amortize the capital works described in this Plan. Assuming that the debt reduction grant from the Province will be approximately 24%* of the long term debt payment, and all other factors being equal, adding $3,120/year to the Municipal expenditures would change the general operating fund debt charge ratio from 15.6% to 15.7%.

$$\frac{153,717 - 36,892}{742,826} = 15.7\%$$

This is well within the limits of good municipal financial management.

* (Average on last 3 years)

SECTION 8 - INTERPRETATION

8.1 LAND USE BOUNDARIES AND ROADS

It is intended that the boundaries of the land use designations shown on the schedules be considered as approximate. It is also intended that the location of the roads as indicated on the schedules be considered as approximate and not absolute. Therefore, amendments to the Municipal Plan will not be required in order to make minor adjustments to the approximate land use boundaries or to the location of roads provided the general intent of the Plan is preserved. Such minor deviations will not be reflected on the schedules.

8.2 FIGURES AND QUANTITIES APPROXIMATE

It is intended that all figures and quantities herein shall be considered as approximate only and not absolute. Amendments to the Municipal Plan will not be required for any minor variance from any of the proposed figures or quantities.

SPRINGDALE MUNICIPAL PLAN REVIEW
1982

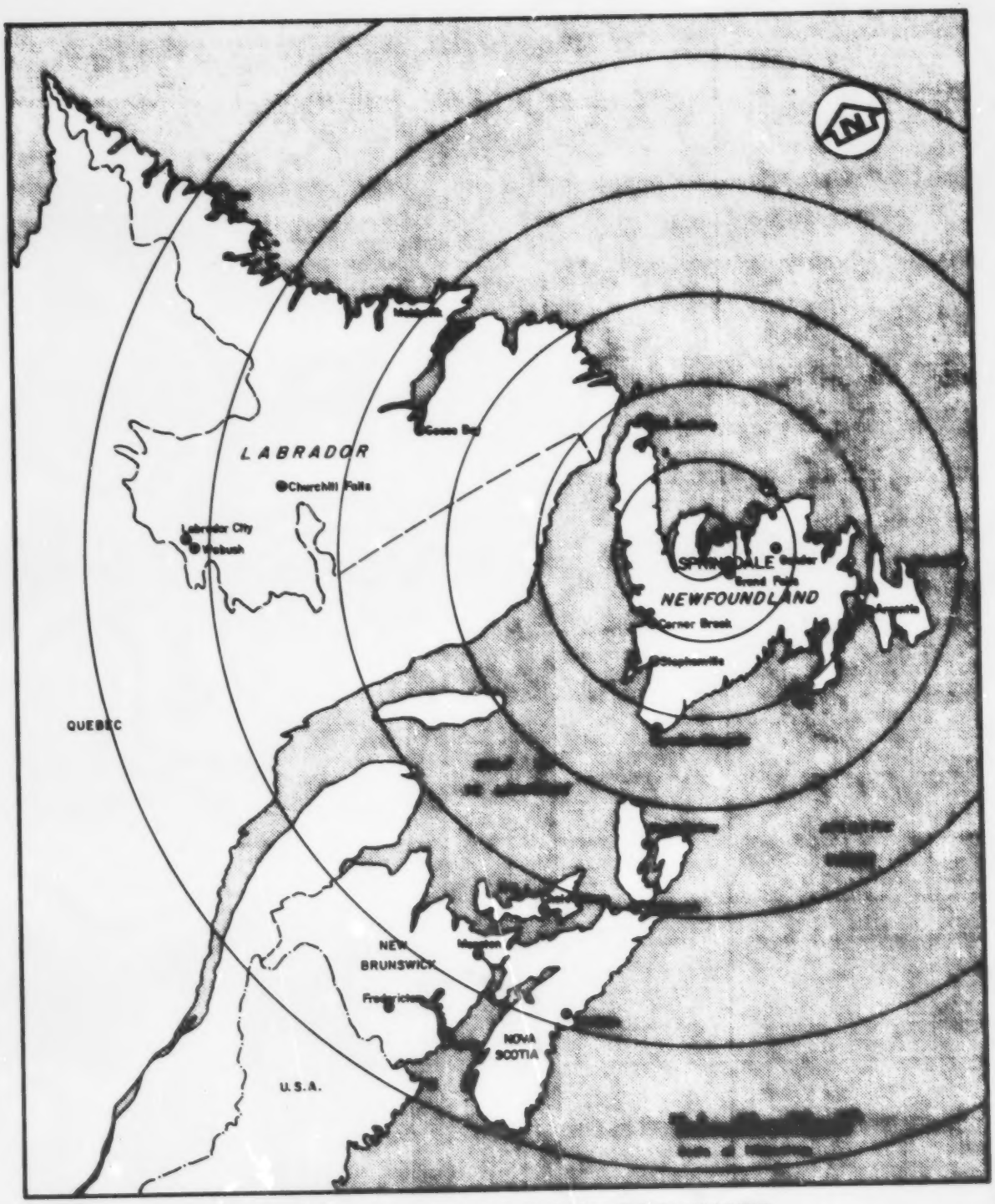
REPORT OF FINDINGS

Undertaken for
Town of Springdale
by
DeLCan
with the financial assistance
of
Department of Municipal Affairs
Provincial Planning Office
St. John's
Newfoundland

06-1380-A

June 1982
Revised August 1982

MAP 1



SPRINGDALE ~ ATLANTIC PROVINCES

DeLCan DE LEUW CATHER CANADA LTD.
CONSULTING ENGINEERS AND PLANNERS

A. PHYSICAL BACKGROUND

1. Location and Regional Context

The Town of Springdale is situated on the north coast of Newfoundland on the north shore of Hall's Bay. By road, Springdale is approximately 532 km (330 miles) northwest of St. John's and 395 km (245 miles) northeast of Port aux Basques. Springdale's geographic co-ordinates are Latitude 56° 16' north, Longitude 49° 30' west. Map No. 1 shows the location of Springdale within the Province of Newfoundland and Labrador and Atlantic Canada.

The Planning Area contains approximately 10,640 hectares of land, of which approximately 300 hectares are covered by water. The incorporated Town of Springdale comprises approximately 1,760 hectares.

2. Topography *

The Springdale area is characterized by relatively hilly terrain associated with various morainal and glacioflurial features. The north half of the planning area contains ridged and hummocky rock outcrops, with some morainal features, concealed by vegetation.* The geology of the area consists mainly of volcanic and sedimentary rock.

The most obvious topographic feature of the region is Hall's Bay which forms the southern boundary of the planning area. There are also a number of ponds scattered throughout the planning area, the largest being Davis Pond in the northeast corner. Davis Pond is approximately 5 km (3 miles) long by .8 km (½) mile wide.

Elevations in the Planning Area range from sea level at Hall's Bay to 138.9 m (456 feet) A.S.L. at the top of the ridge running north of the Town.

* Surficial Landform Classification
Environmental Geology Division
Department of Mines and Energy, Nfld.

3. Vegetation*

The Springdale area is covered by relatively mature forests of black spruce and balsam fir with some pockets of white birch.

4. Climate **

Cold winters and warm summers characterize the climate of the Springdale area. For the month of January the mean daily temperature is -6.3° C (20.6° F). While the figure for July is 16.7° C (62.1° F).

Annual precipitation averages about 96.8 cm (38 inches) of which 71 cm (27.9 inches) falls as rain and 249 cm (98 inches) falls as snow. The driest month of the year is usually April while August tends to be the wettest month.

* Forest Inventory Mapping, Forest Inventory Division
Dept. of Forestry and Agricultural, Nfld.

** Atmospheric Environmental Services; Canada

B. HISTORICAL DEVELOPMENT *

The community of Springdale came into being in the early 1870's as a result of the establishment of a sawmill in the area. The logging and lumber industry played an important role in the early development of the community. In 1909 the Anglo-Newfoundland Development Company started a major woodcutting operation which attracted a large number of workers to the Springdale area.

The next stage in Springdale's development occurred over the period 1912 to 1929 when a substantial herring fishery was established in the area. At its peak, the herring factory employed 300 people in 9 herring factories in the area. This "boom" helped to establish Springdale as the economic and business centre of the Green Bay area.

In 1945 the rural district of Springdale and South Brook was incorporated with a council and mayor who governed the entire area. In 1961 the Town of Springdale was incorporated. In terms of planning history the first Municipal Plan for the Town was prepared in 1966. In 1975 the present Springdale Planning Area was established and a plan prepared for the entire area.

Springdale continues to enjoy its role as the regional service centre for the Green Bay area.

* Springdale Community Profile, The Nor'wester Vol. 2 No. 49

C. POPULATION AND THE ECONOMY

1. Introduction

The purpose of this section is to examine the characteristics of two key components of the Planning Area; its population and its economy. Analysis of these two components will be used as a basis for forecasting future population and levels of economic activity.

In order to examine the Planning Area's population and economy it is necessary to establish Springdale's role within its regional context. For this purpose we have established a zone of influence or "Trade" area for which Springdale serves as the focus for providing services (retail and educational) and employment. Springdale's Trade Area is illustrated on Map No. 2.*

2. Population

(a) Past Growth

In order to estimate the potential for future population growth historical trends in growth rates are reviewed. Historial growth rates for both the Town of Springdale and its Trade Area are set out in Tables 1 and 2.

Table 2 shows that except for the period 1961-1966 the Town of Springdale's annual average growth rate has been higher than that of the Province as a whole. During the years 1966 to 1971 Springdale grew at an annual rate almost 3 times faster than the Province. However, this growth slowed considerably over the period 1971 to 1976 to a rate only slightly higher than Newfoundland's growth rate. The Town's population declined between 1976 and 1981. During the twenty year period 1961 to 1981 the Town of Springdale's population has increased by 728 people or an average growth of 36 people per year.

*The Trade Area corresponds to Census Subdivisions C, D, & P of Census Division 8.

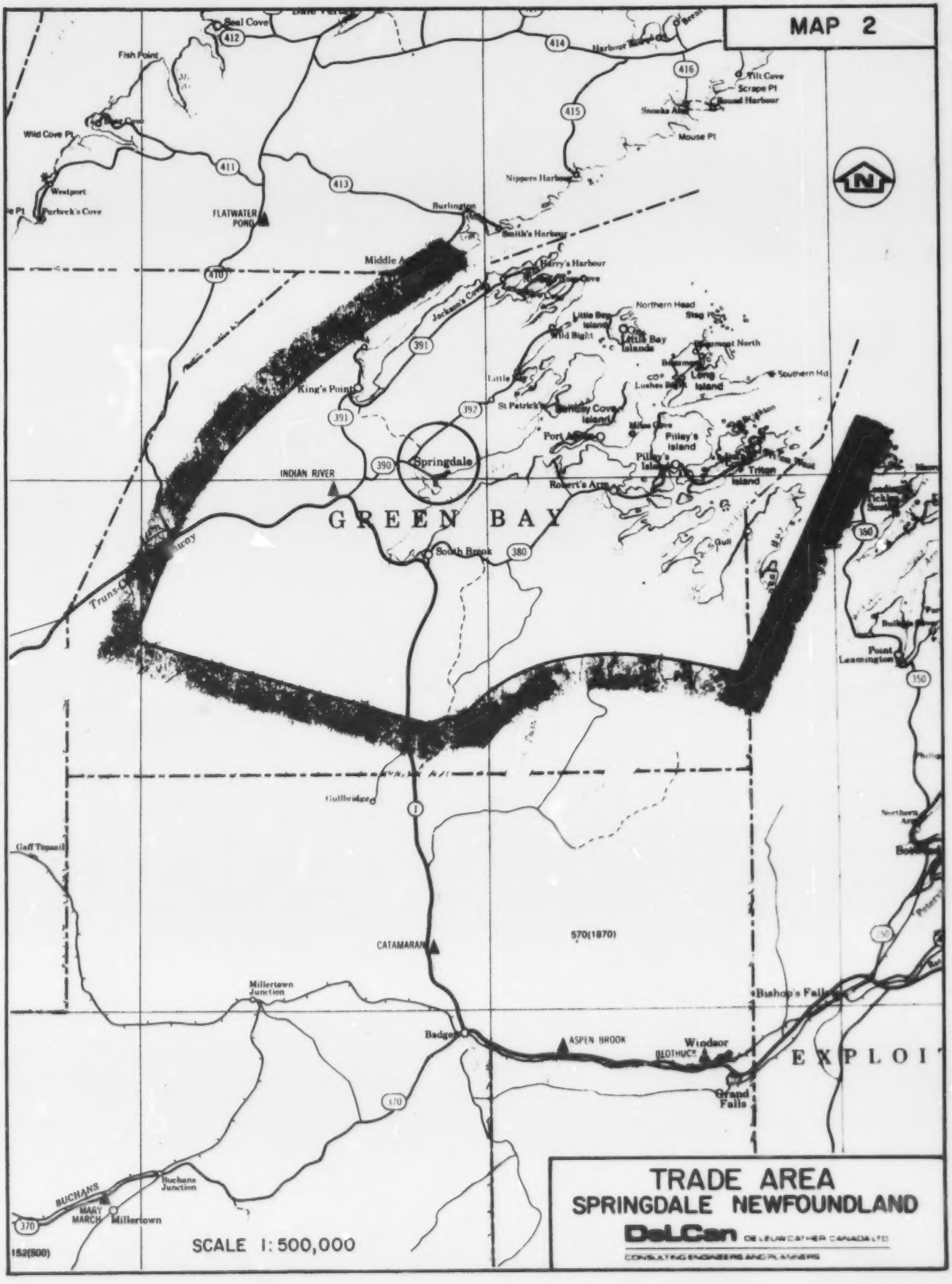

MAP 2
Seal Cove
Fish Point
Wild Cove Pt
Westport
Burlington
FLATWATER POND
Middle Arm
Nippers Harbour
Tilt Cove
Scrape Pt
Mouse Pt
Smith's Harbour
Harry's Harbour
Northern Head
Little Bay Islands
King's Point
Springdale
INDIAN RIVER
GREEN BAY
South Brook
Robert's Arm
Triton Island
Pilley's Island
Long Island
Southern Hd
Point Leamington
Gaff Topsail
Gullbridge
CATAMARAN
Millertown Junction
Badger
ASPEN BROOK
Windsor
Grand Falls
Bishop's Falls
BUCHANS
MARY MARCH
Millertown
Buchans Junction
570(1870)
SCALE 1: 500,000
TRADE AREA
SPRINGDALE NEWFOUNDLAND
DeLCan
DE LEUW CATHER CANADA LTD
CONSULTING ENGINEERS AND PLANNERS

TABLE 1

POPULATION

SPRINGDALE MUNICIPAL PLAN REVIEW 1982

	Jurisdiction	1961	1966	%	1971	%	1976	%	1981	%
1.	Springdale	2,795	2,773	28.8	3,225	31.4	3,515	32.6	3,501	32
2.	Balance of Trade Area	N/A -	6,854	71.2	7,040	68.6	7,250	67.4	7,442	68
3.	Total of Trade Area (1 + 2 = 3)	N/A -	9,627	100	10,265	100	10,765	100	10,943	100
4.	Newfoundland	457,853	493,396	-	522,105	-	557,725	-	567,681	-

RF5

Source: Statistics Canada, Census of Canada, 1961, 1966, 1971, 1976 and 1981

TABLE 2

RATES OF POPULATION CHANGE

SPRINGDALE MUNICIPAL PLAN REVIEW 1982

	SPRINGDALE	BALANCE OF TRADE AREA	TOTAL TRADE AREA	NEWFOUNDLAND
	% Change	% Change	% Change	% Change
1961-1966	-0.8%	--	--	7.8%
1966-1971	16.3%	2.7%	6.6%	5.8%
1971-1976	9.0%	2.3%	4.9%	6.8%
1976-1981	-0.4%	2.6%	1.7%	1.8%

RF6

From Table 2 it can be seen that with the exception of the period 1976-1981, the population in the part of Trade Area which surrounds Springdale has been growing at a slower rate than that of the Town. However, while between 1966-1971 the total Springdale Trade Area grew at a faster rate than the province, it exhibited a slower rate of growth between the 1971-1976 and 1976-1981 periods.

TABLE 3

PERCENTAGE SHARE OF TRADE AREA GROWTH

	Growth of Springdale Trade Area	% of Total	Springdale Share	% of Total	Balance of Trade Area Share	% of Total
1966-1971	638	100%	452	70.8%	186	29.2%
1971-1976	500	100%	290	52.0%	210	48%
1976-1981	178	100%	-14	-7.9%	192	107.9%

RF8

Table 3 illustrates Springdale's share of the Trade Area population growth. From Table 1 it is evident that the Town of Springdale accounts for a larger proportion of the Trade Area population growth than would be expected given its size in relation to the Trade Area population. For example, in 1981, Springdale contained 32% of the Trade Area's population. Yet, over the period 1971 to 1981 Springdale's population growth accounted for 55.3% of the Trade Area's population growth. Therefore, population growth in the area is concentrating in Springdale which has reinforced the Town's function as a regional centre. While this trend is evident over the 10 year period mentioned above, a short term trend (1976-81) has appeared in which the Trade Area has grown but Springdale itself has shown a minor decline in population.

(b) **Age Structure**

When analyzing an area it is important to understand the age structure of the population as it has implications for the type of facilities that the population will require. For example, an area with a high proportion of its population in the younger age groups will need more school facilities than an area with an older population. Table 4 shows the population for the Town of Springdale and the Province for the years 1966, 1971 and 1976. The first point of interest from the Table is the steady decline in the percentage of Springdale's population in the 0-4 age bracket from 14.3% in 1966 to 11.7% in 1976.* There is also a similar decline in the percentage of the population in the school age bracket from 40.0% in 1966 to 35.9% in 1976. This decline reflects the trend towards declining birth rates and the movement of the "baby boom" through the school age brackets.

The decreases in the younger age bracket are offset by increases in the percentage of Springdale's population in the 20-44 age group

* As of June, 1982, the age/sex distribution of the Census Canada 1981, population figures are not available.

(early working age) from 29.0% in 1966 to 34.5% in 1976. This increase reflects the movement of the "baby boom" into the workforce and represents the maturing of Springdale's population. Over the period 1966 to 1976 there was also a slight increase in the percentage of the late working and retirement age brackets. When the 1981 population figures become available for the various age groups in the Town it is estimated that the percentage in the retirement age group might have increased due to the construction of the senior citizen's residence.

As illustrated by Table 4 Springdale's age structure is fairly close to that of the Province. Springdale has a slightly younger population as shown by the fact that in 1976, 82.1% of the Town's population was under 44 years of age compared to only 78.5% of Newfoundland's population. However, evidence that the Town's population is maturing and moving closer to the Province's age structure is shown by the fact that figures for 1971 were 84.5% of Springdale's population under 44 years compared to 79% for Newfoundland.

A more detailed breakdown of the changes occurring in the numbers within each age bracket is given in Table 5. The Table compares the numbers in a certain age group in 1976 with the preceeding age group from 1971 to illustrate the net change. For example, the size of the 10-14 age group in 1976 is compared with the 5-9 age group in 1971 to see if the group has increased or decreased over the 5-year period. These figures are useful to illustrate either in-migration or out-migration for each age grouping.

From a review of Table 5 a number of trends can be identified. First, the trend towards a smaller percentage of the population in the younger age groups is seen by comparing the period 1966 to 1971 and 1971 to 1976. In 1966 to 1971 the changes between the 0-4 to 5-9 groups was positive; however, from 1971 to 1976 this group declined in size. Further, in the 5-9 and 10-14 groups the change over 1966 to 1971 was +55 people, whereas over 1971 to 1976 this had dropped to an increase of only 5.

TABLE 4

POPULATION BY AGE GROUPS

TOWN OF SPRINGDALE

1966, 1971 and 1976

	SPRINGDALE						NEWFOUNDLAND		
	1966		1971		1976		1966	1971	1976
AGE GROUP	No.	%	No.	%	No.	%	%	%	%
0 - 4 (pre-school)	397	14.3	440	13.7	410	11.7	13.9	12.0	10.5
5 - 19 (school age)	1,108	40.0	1,265	39.2	1,250	35.9	37.5	37.0	34.5
20 -44 (early working age)	804	29.0	1,020	31.6	1,210	34.5	28.0	30.0	33.5
45 - 64 (late working age)	320	11.5	345	10.7	435	12.5	14.7	15.5	15.0
65 and over (retirement)	144	5.2	155	4.8	195	5.6	5.5	6.0	6.5
TOTAL	2,773	100.0	3,225	100.0	3,515	100.0	100.0	100.0	100.0

Source: Statistics Canada, Census of Canada, 1966, 1971 and 1976

RF11

TABLE 5

SPRINGDALE - POPULATION BY AGE GROUP, AND NET CHANGE

FOR EACH AGE GROUP OVER 5 YEAR PERIODS*

AGE GROUPS	0 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 34	35 - 44	45 - 54	55 - 64	65 - 69	70+	TOTAL
1966 (Total)	397	405	369	33'	203	337	264	177	143	60	84	2,773
1971 (Total)	440	420	460	3' 5	300	390	330	210	140	45	115	3,235
CHANGE*		+23	+55	+16	-34	+19	+29	-10	-20	-27	-29	(462)
1971 (Total)	440	420	460	385	300	390	330	210	140	45	115	3,235
1976 (Total)	410	420	425	405	335	515	360	265	170	70	125	3,515
CHANGE*		-20	+ 5	-55	-50	+15	+ 5	-15	- 5	+ 5	-20	(290)

Source: Statistics Canada, Census of Canada, 1966, 1971 and 1976

* NOTE: Nos. of children 0-4 in 1971 is compared to nos. of children 5-9 in 1976.

RF12

The second trend which can be identified is the out-migration of people after we leave the 15-19 age bracket. Over the period 1971 to 1976 the net change in the 15-19 and 20-24 group was -50 people. This would seem to indicate the out-migration of young people who have completed their education and are seeking employment elsewhere.

On the positive side, for both periods 1966 to 1971 and 1971 to 1976, there was a net in-migration of people in the 25-34 and 35-44 age groups. This net increase is likely the result of people moving into Springdale to take permanent jobs. However, this trend was slower over 1971 to 1976 with only a net increase of 20 people in the 25-44 age group compared with 48 people between 1966 and 1971.

3. The Economy

(a) Introduction

In updating Springdale's Municipal Plan, it is important to review and analyze data relating to the Town's economy. Indications of Springdale's economic base, its nature and growth are vital to arrive at an overall profile of the Community. Economic growth in terms of employment translates directly into demand for residential development, community facilities and other land uses.

(b) Regional Economy

As mentioned in the introduction to Section C, it is important to realize that Springdale serves as the centre of a regional hinterland. People within the Trade Area, as outlined on Map 2, use the Town for the provision of certain services. Therefore, Springdale's economy is dependent on trade from its hinterland, resulting in many jobs within the Town in the service sector. However, residents within Springdale also work in the region in the three key industries of forestry, mining and fishing. A brief description of each follows.

1. Forestry

The Green Bay region and adjacent accessible areas provide one of the most productive forest areas in Newfoundland. The Green Bay area supplies wood to the mills at Grand Falls, Corner Brook and Stephenville. The actual physical characteristics of the forestry land resources are covered in detail in Section I - Land Resources of this Report.

In 1981, approximately 355 people were employed in the region's forest industry*. Of the total number of employees an estimated

* Telephone survey of major employers conducted by DeLCan, Sept. 1981.

100 are from Springdale itself. The two major employers are Abitibi-Price of Grand Falls and Bowaters from Corner Brook. The total number of men employed in the forest industry in 1975 was given as 220*. Therefore over the 6-year period 1975 to 1981, 135 jobs have been added for a growth rate of 100% per annum.

Representatives from the two major employers felt that current employment levels would remain stable and that there was the possibility of slight increases over the next 5 to 10 years.

2. Mining

The mining industry has played an important role in the past growth of Springdale and the region. At present all mines in the area have ceased operations.**. There are numerous high grade mineral and base metal deposits in the Springdale region (see Section I-Land Resources) but due to the current slump in world metal prices it is not economically feasible to mine the deposits. Therefore, the present level of employment in the mining industry within the region is extremely low.

3. The Fishery

The fishery does not play a major role in the regional economy although at one point in the Town's history it was very important.

In 1981, within the Town of Springdale, there were only an estimated 15 households involved in the inshore fishery. The average gross landing per person is approximately $6,000 per year.***.

* Springdale Municipal Plan, 1975

** Telephone interview by DeLCan with Elgin Taylor August, 1982

*** Government of Canada, Dept. of Fisheries & Oceans, telephone interview Springdale Office, October 1981.

The 1975 Springdale Municipal Plan quoted figures of 343 persons involved in the inshore fishery and an average gross landing of $2,000 per annum for the year 1971.*

(c) Labour Force Structure and Size

1. Structure

One important characteristic of an area's economy is the structure of its labour force. Table 6 shows Springdale's labour force by industry division for 1961 and 1971. Unfortunately labour force data from the 1981 census will not be available for some time. Consequently, the 1977 and 1982 - Municipal Electoral Polls were tabulated to indicate the type of jobs that people in Springdale occupy. (See Table 7).

A number of characteristics of Springdale's economy can be seen from a review of Table 6. First, in terms of changes over the period 1961 to 1971 in the structure of Springdale's economy,it is interesting to note the reversal between the dominance of forestry and mining. In 1961 forestry accounted for 24% of Springdale's workforce whereas mining accounted for only 9.3% of the total employment. By 1971 the roles had reversed with mining comprising 22% of the labour force and forestry only 4.7% . The labour force tabulation in Table 7 shows a swing back to forestry as the dominant resource base employer due to the number of mine closings and increases in forest industry employment.

Another change over the period 1961 to 1971 in the structure of Springdale's economy was the increase in the Community Business and Personal Service sector. In 1961 this sector accounted for only 16.6% of Springdale's labour force but by 1971 this percentage had grown to 24.4%. Increases also tock place in the Finance, Insurance, and Real Estate sector which increased from 0.6% in 1961 to 2.2% in 1971. The increases in service sector employment (which includes

* Springdale Municipal Plan, 1975

retail workers) is an indication of the strengthening of Springdale's role as a regional service centre. If figures for 1981 were available they would probably show a further increase in the population of the Town's population employed in the service sector.

Interesting comparisons can also be made between Springdale's employment structure and that for the Province as a whole. From Table 6 it can be seen that Springdale has a very low proportion of its labour force in the manufacturing sector. In 1971, only 1.1% of the Town's labour force was employed in a manufacturing industry compared to the Provincial figure of almost 12%. The lack of a manufacturing base reflects Springdale's function as an area of resource base exploitation or production of raw materials. For example, the mining and forestry sectors accounted for 25% of Springdale's labour force in 1971 as compared to only 5% in these two categories for Newfoundland.

Springdale has a higher than Provincial average proportion of its labour force in trades (21.5% compared to 15.6%) and Business and Personal Services (24.5% to 21.9%). This also reflects Springdale's role as a regional service centre.

In estimating labour force characteristics for 1981, it would probably be safe to assume that forestry accounts for a considerably higher percentage of the Town's employment. Manufacturing may have increased slightly. The trend towards increases in the percentage employed in the service sector identified over the period 1961 to 1971 has most likely continued through to 1981.

TABLE 6

EXPERIENCED LABOUR FORCE BY INDUSTRY DIVISION

TOWN OF SPRINGDALE AND PROVINCE OF NEWFOUNDLAND

1961 and 1971

	SPRINGDALE 1961		SPRINGDALE 1971		NEWFOUNDLAND 1971	
INDUSTRY DIVISION	No.	%	No.	%	No.	%
Agriculture & Fishing	6	1.2	10	1.1	7,985	5.4
Forestry	124	24.0	45	4.7	2,510	1.7
Mines, Quarries, Oil Wells	48	9.3	207	21.7	4,945	3.3
Manuafacturing	16	3.1	10	1.1	17,605	11.9
Construction	49	9.4	127	13.3	15,535	10.5
Transportation, Communications and Utilities	31	6.0	56	5.9	16,405	11.1
Trade	108	21.0	205	21.5	23,135	15.6
Finance, Insurance Real Estate	3	0.6	21	2.2	2,615	1.8
Community Business and Personal Services	86	16.6	233	24.4	32,360	21.9
Public Administration and Defence	28	5.4	41	4.3	11,805	8.0
Undefined or Unspecified	20	3.9			13,095	8.8
TOTAL	519	100	955	100	147,990	100

Source; Statistics Canada, Census of Canada, 1961 and 1971

TABLE 7

LABOUR FORCE BY OCCUPTION
1977 - 1982*
TOWN OF SPRINGDALE, NEWFOUNDLAND.

	1977		1982	
OCCUPTION	M	F	M	F
ACCOUNTANT	10	2	9	2
ASSAYER/GEOLOGIST	2	1	3	0
BARBER/BEAUTICIAN	2	7	4	7
BLACKSMITH/TINSMITH	0	0	2	0
BUTCHER	4	0	3	1
CARPENTER	41	0	38	0
CLERICAL	47	69	49	126
CLERGY	7	4	7	2
CONTRACTOR	3	0	18	0
DOMESTIC	0	38	0	21
DRUGGIST	3	0	4	0
ELECTRICAN	17	0	11	0
ENGINEER	2	0	1	0
FARMER	8	0	1	0
FISHERMAN	3	0	25	0
FISH/WILDLIFE/FORESTRY	21	0	20	0
FOOD SERVICES	3	15	1	18
FOREMAN	15	0	7	0
HEAVY EQUIP. OPERATOR	19	0	19	0
HOUSEWIFE	0	512	0	594
JANITOR	15	2	14	2
LABOURER	52	0	69	0
LINESMAN	10	0	20	0
LOGGER	54	0	91	0
MANAGER (or Assistant)	30	5	56	8
MACHINIST	3	0	0	0
MECHANIC	32	0	44	0
MEDICAL/DENTAL	8	39	10	62
MINER/DRILLER	14	0	24	0
OTHER	10	3	26	2
PLUMBER	4	0	2	0
RETIRED/PENSIONER	125	91	154	67
RCMP	6	0	5	1
SALES	14	10	13	0
SEAMAN	2	0	0	0
SELF-EMPLOYED	22	1	27	1
SOCIAL WORKER	2	2	1	5
STUDENT	23	10	32	19
SURVEYOR	2	0	7	0
TEACHER/INSTRUCTOR	45	24	43	44
TECHNICIAN (unspecified)	12	1	10	2
TRUCK/BUS/TAXI DRIVER	39	0	54	0
UNDERTAKER	0	0	1	0
UNEMPLOYED	91	23	50	27
WAITRESS/BARTENDER	4	11	2	18
WATCHMAN	8	0	6	0
WELDER/PIPEFITTER	6	0	13	0
SUB-TOTAL	843	873	999	1029
TOTAL	1,716		2,028	

* SOURCE: 1977 & 1982 Enumeration Lists - Town of Springdale, Newfoundland.

(b) Employment Growth and Participation Rates

Table 8 shows the growth of Springdale's labour force from 1961 to 1976. Over the period 1961 to 1971 the Town's labour force grew at a rapid 8.4% per annum. However, over the years 1971 to 1976 this growth had dropped to 4.0%, which is the same as the annual growth rate experienced in Newfoundland's labour force over the same period. Therefore, Springdale's economy did not "out perform" the economy of the Province as a whole. Over the 5 year period 1971 to 1976 an average of 37 new jobs were created annually in the Town.

TABLE 8
EMPLOYMENT GROWTH TOWN OF SPRINGDALE
1961 to 1976

YEAR	LABOUR FORCE	AVERAGE ANNUAL PERCENTAGE CHANGE	AVERAGE ANNUAL NEW JOBS
1961	519		
1971	955 (1961-71)	8.4	44
1976	1,140 (1971-76)	4.0	37

Source: Statistics Canada

Another indication of labour force activity can be obtained through participation rates, a measure whereby the size of the labour force is compared to the total population that is of working age (i.e. 15 years and older). From Table 9 it can be seen that Springdale's participation rate of 50.3% is very close to the figure of 49% for Newfoundland. This indicates that approximately half of Springdale's population of working age is active in the labour force.

TABLE 9

LABOUR FORCE ACTIVITY

TOWN OF SPRINGDALE AND PROVINCE OF NEWFOUNDLAND

1976

		POPULATION 15 YEARS AND OVER	TOTAL LABOUR FORCE	EMPLOYED	UNEMPLOYED	PARTICIPATION RATE
SPRINGDALE	T	2,265	1,140	970	170	50.3%
	M	1,140	790	650	140	69.3%
	F	1,125	350	320	30	31.1%
NEWFOUNDLAND	T	369,960	181,510	154,130	27,380	49 %
	M	187,180	123,330	104,365	18,970	65.9%
	F	182,780	58,180	49,765	8,410	31.8%

Source: Statistics Canada

(d) **Unemployment**

Unemployment levels are also a measure of the state of an area's economy and Table 10 shows the 1976 Unemployment rate for Springdale and Newfoundland. As can be seen from the Table Springdale's unemployment rate of 17.6% for males is just above the rate for the Province of 15.4%. The unemployment level for females in Springdale of 8.7% is lower than the Provincial level of 14.5%. Springdale's overall unemployment rate of 14.9% in 1976 compares closely with the Provincial rate of 15.1%.

(e) **Income Levels**

Average income levels are another measure of the economic health of an area as they give a picture of the relative "wealth" of a

TABLE 10

UNEMPLOYMENT RATE

SPRINGDALE AND NEWFOUNDLAND

1976

		UNEMPLOYMENT RATE
SPRINGDALE	M	17.6%
	F	8.7%
NEWFOUNDLAND	M	15.4%
	F	14.5%

Source: Statistics Canada

TABLE 11

AVERAGE INCOME OF INCOME TAX FILERS

YEAR	SPRINGDALE	ST. JOHN'S	CORNER BROOK	NEWFOUNDLAND
1974	8,014	7,807	7,497	6,942
1975	9,048	9,139	8,483	7,975
1976	9,958	10,065	9,477	8,948
1977	10,610	10,693	10,147	9,494
1979	12,158	14,138	13,575	12,574

Source: Taxable Returns by Individuals by Community
Nfld. & Labrador 1971-1979
Nfld. Statistics Agency, Cabinet Secretariat, Executive Council
September 1981

Town. From Table 11 it is evident that the average income of tax filers in Springdale is only slightly lower than that for Newfoundland.

While in the past, the average income has tended to be similar in size to that of St. John's and Corner Brook, a significant change has occurred as the growth in average income in Springdale has been slower than that of the two major centres in the province. Furthermore, while Springdale has traditionally had a higher average income than Corner Brook, this relationship has been reversed between 1977 and 1979.

D. POTENTIAL OFF-SHORE OIL RELATED DEVELOPMENT

1. Introduction

One potential development which would have a direct and significant impact on the Springdale Planning Area is the development of an onshore construction site for offshore drilling platforms. A site at the southerly end of Hall's Bay has been identified as having a high potential for the construction of either steel or concrete drilling platforms to service the offshore oil fields.* Hall's Bay was identified as a potential location, in part, due to the availability of high quality aggregate in the immediate area. Therefore, the site has a higher potential for concrete platform construction rather than for steel.

In order to try and anticipate the magnitude of the impact of a development of this type it is necessary to understand the scale of development which is envisaged.

2. Scale and Nature of Construction Activities

(a) Physical Size

In terms of the actual size of the construction site the requirement is for approximately 20 hectares of foreshore land and 60 hectares of industrial back-up land for related development. The construction site would be concentrated at the end of Hall's Bay.

(b) Employment Levels: Type

Employment levels and types of jobs are directly related to whether steel or concrete platform are constructed. If it is steel

*Govt. of Nfld., Dept. of Development "Site Locations for Onshore Petroleum Related Developments" Feb., 1981

NOTE: All figures in this section from above report unless otherwise stated.

platforms then a higher component of skilled labour is required, for example welders and fitters. Concrete construction requires skills of a more general nature. The Provincial Department of Development report used a breakdown of 1/3 skilled, 2/3 unskilled for concrete platform construction.

In terms of employment levels the best indicator is an examination of experiences in Scotland and England with developments of a similar nature. From conversations with individuals in the oil industry employment levels of approximately 1,700 jobs have been established for the steel platform construction (this figure based on construction of 1 platform at at time). The numbers of employees required to construct 1 concrete platform range from 2,800 to 3,200.

3. Probability of Development

Before distributing the anticipated population growth associated with the employment levels mentioned above, it would be prudent to assess the probability of the Hall's Bay development proceeding. From our conversations with members of the oil industry it would appear that two factors must be considered, these are locational and technological.

Locational factors deal primarily with the question; what oil fields are the drilling platforms being constructed for? It is only logical that the construction site be located as close as possible to the platform's eventual destination to minimize towing distance. Given the extent of known reserves at the Hibernia field, and the likely hood of its early development, it is more probable that the Grand Banks fields will be developed before the Labrador shelf is. Therefore, it is unlikely that Hall's Bay will proceed in the short term.

Technological factors address the issue of appropriate construction type to withstand the hazards of the North Atlantic. Steel platforms would appear to have an advantage over concrete in this regard. Therefore, as Hall's Bay was primarily suited for concrete construction perhaps another site would have greater potential. However, a couple of drawbacks to steel platforms are that the skilled labour force is not as readily available, and that the technology to produce the components of the platforms is not fully available within the Province. Therefore, concrete platforms have the advantage in terms of using readily available raw materials (i.e. aggregate) and a better utilization of the local labour force.

Our hypothesis for the purpose of the plan update, is that the Hall's Bay development will proceed and concrete platforms will be constructed on the site. However, the timing of the development is difficult to predict, it probably will not be within the short term (i.e. next 5 years) and could be beyond the planning period (i.e. past 1991).

4. Geographical Distribution of Impact

Having assumed that Hall's Bay will be developed as a concrete platform construction site at some point in the future it is possible to estimate the population impact of that development on Springdale. The following exercise is highly theoretical and is based on a number of assumptions which may not bear total resemblance to reality. However, the exercise is useful to give at least some indication of the magnitude of population impact.

(a) Job Creation

Having selected the concrete construction platform option we will use the associated employment range of 2,800 to 3,200 people. For ease of calculations, 3000 is used.

(b) **Employment Multiplier Effect**

The development of a major industry such as the Hall's Bay platform construction project does not only provide jobs on site. A major project will act as a stimulus to the economy and consequently, other jobs are created in industries which provide goods and services to the project. As well, the additional numbers of people and the additional buying power, associated with the project, create further need for goods and services.

Therefore, a job created on the Hall's Bay project will have the effect of creating additional jobs in the local economy. Research into these relationships in small communities have indicated that the multiplier effect is actually very small.* This is born out in the literature where it is reported that

> While new industry obviously increases the income of an area, income distribution is not always equitable and that certain segments of the population do not experience increased income. In particular, the elderly, the less educated, females, and minority groups tend to show a depressed relative income status.
>
> The expected multiplier effects (new secondary job creation, local purchases of goods and services, increased real estate sales, business expansion and so on) do occur but at a lower level than is often predicted or anticipated. Commuting workers tend to "leak" the payroll out of the community. Often the new industry is tied to a national or multinational conglomerate which supplies everything but labour.**

Consequently, it is assumed that the multiplier effect of even a major project like this one will have an employment multiplier of 1.1. This means that for every 10 direct jobs that are created, 1 indirect job will follow. This would then mean that at full production, the Hall's Bay project would produce approximately 3000 direct jobs plus 300 indirect ones for a total of 3300 new jobs.

* Personal Communication - Brian Dick, Economist with DREE, St. John's, March 1982.

** Bowles, Roy T., Social Impact Assessment in Small Countries Butterworths, Toronto, 1981.

(c) **Definition of Catchment Area**

The Department of Development, in evaluating the Hall's Bay site, established a 50 kilometer or 45 minute driving time commuter shed. This commuter shed is shown on Map 3 superimposed on the Springdale Trade area (described in Section C of this Report). As can be seen from Map 3 the commuter shed roughly approximates Springdale's Trade area. In terms of population, the Springdale Trade area is approximately 75% of the size of the Hall's Bay commuter shed. Therefore, of those people who move into the commuter shed to work at Hall's Bay one could expect 75% to live within Springdale's Trade area.

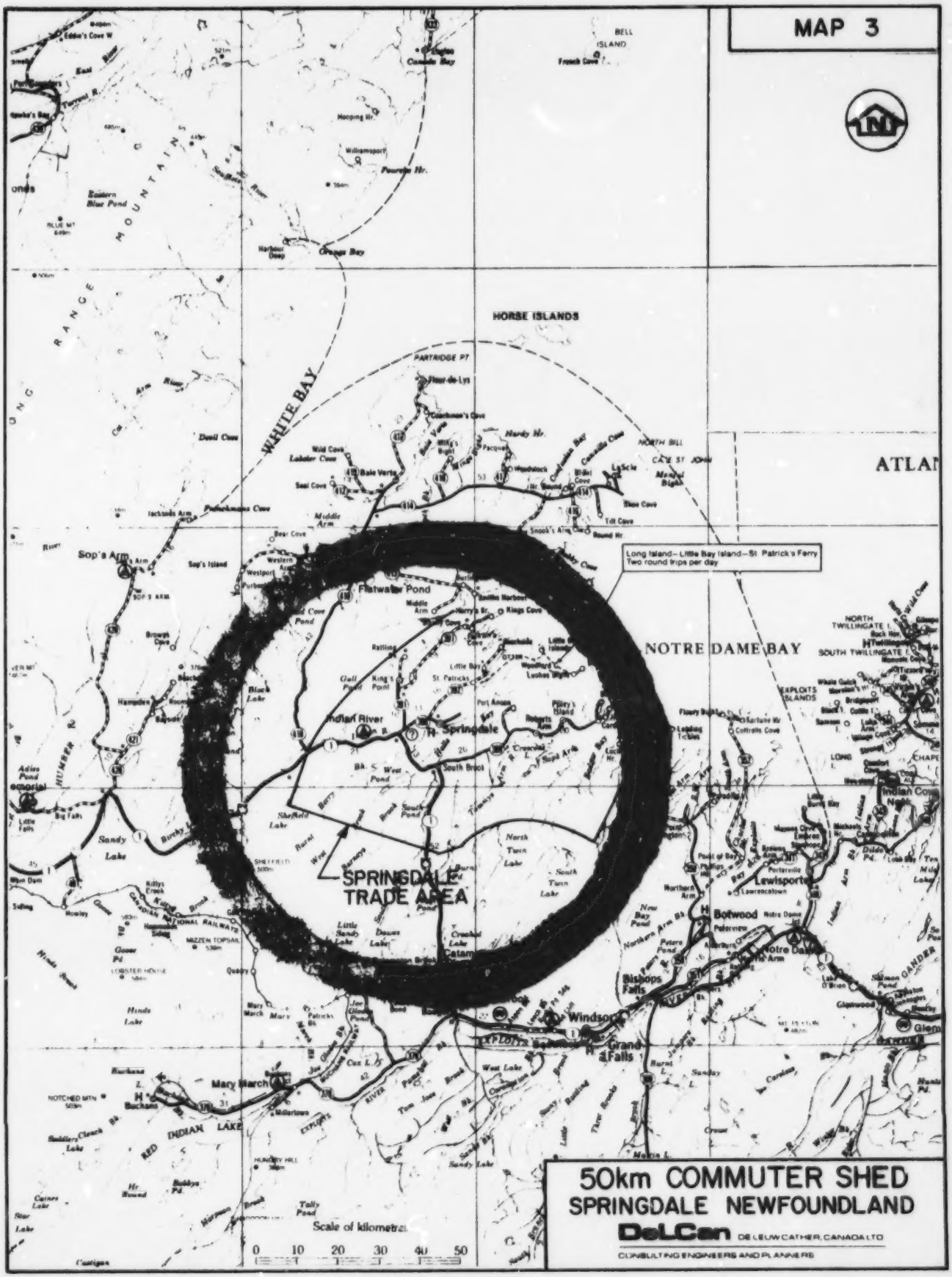
TABLE 12

POPULATION - SPRINGDALE MANPOWER OFFICE TERRITORY

CENSUS YEAR	POPULATION
1971	18,598
1976	20,030
1981*	19,425

Source:

*Preliminary
Manpower & Immigration, 1981


MAP 3
HORSE ISLANDS
WHITE BAY
NOTRE DAME BAY
Long Island–Little Bay Island–St. Patrick's Ferry
Two round trips per day
SPRINGDALE
TRADE AREA
Springdale
Indian River
Flatwater Pond
Sop's Arm
Lewisporte
Botwood
Notre Dame
Bishops Falls
Windsor
Grand Falls
Mary March
Scale of kilometres
0 10 20 30 40 50
50km COMMUTER SHED
SPRINGDALE NEWFOUNDLAND
DeLCan DE LEUW CATHER, CANADA LTD
CONSULTING ENGINEERS AND PLANNERS

(d) Local Labour Force: Availability and Skills

In an interview with the Springdale Regional Canada Manpower Office it was determined that there are roughly 2,500 people currently seeking employment in the Springdale area. The Springdale Manpower office covers an area from La Scie in the north to Brighton and Triton in the south. This area approximates the Hall's Bay commuter shed and in 1981 had a population of approximately 19,400 people. (see Table 12).

Of the 2,500 people seeking work, 50% or 1,250 had some skills in the construction trades. Therefore, of the required labour force of 3,300 from Section 4(a) and (b), approximately 50% are available within the commuting area (for ease of calculations assume 50% or 1,650 people). Another 500 people should be added to the local labour force available to account for those individuals who are presently employed but who might change jobs to work at Hall's Bay. Therefore, it is assumed that 2,150 workers or 65% of the required labour force of 3,300 are available within the Hall's Bay catchment area.

(e) Potential In-Migration of Labour Force

Assuming that all 2,150 of the available local labour force is hired, then an additional 1,150 workers will be required from outside of the Hall's Bay labour shed.

(f) Percentage of In-Migration Captured by Springdale

Given that 1,150 workers are moving into the Hall's Bay catchment area the next step is to determine Springdale's share of that influx. From Statement 4(d) we know that the population of the Springdale region is 75% of the Hall's Bay catchment area, so applying these percentages we would expect that the Springdale region would attract the same proportion of the in-migrations. Therefore, 75% of 1,150 represents 860 workers. The section on population shows that the

Town of Springdale cnly captures 26% of the growth in its catchment area. Therefore, if this trend continues, we would expect that the Tcwn of Springdale would take in 223 wcrkers who are employed at Hall's Bay.

(g) Additional Population Based on Household Size

It is assumed that the 223 additional residents will create additional households. Household size has been declining and assuming that the m'grants will be young workers, household size would possibly be low. For purposes of this assessment, a household size of 2.5 persons will be used. This would create an additonal population of approximately 560 people.

(h) Time Frame

Obviously a project the size of Hall's Bay will not be developed overnight. For the purpose of this Report, we have assumed a two-year development schedule and have distributed the population growth equally over those two years. So over the first year of the development of Hall's Bay the Town of Springdale could expect an influx of 220 people.

E. POPULATION FORECAST

1. Base Year Population

The 1981 official census counts have recently been made available to the public. The 1981 official population for the Town of Springdale is 3501. The following population projection for the Town over the planning period is determined from a base year population of 3501.

2. Scenario A - No Hall's Bay

If one examines the historical growth rate trends for Springdale one would notice that the growth rate has been declining since 1966. Using the base year 1981 population of 3,501 the average growth rate for the Town over the period 1971 to 1981 is approximately 0.85% It is felt that this represents a reasonable growth rate for projection purposes given the trend towards a decline. Using a growth rate of 0.85% per annum and the official 1981 population of 3,501 the following projection is calculated.

YEAR	POPULATION
1981	3,501
1982	3,531
1983	3,561
1984	3,591
1985	3,622
1986	3,653
1991	3,811

At the end of the planning period in 1991 the projected population for the Town of Springdale would be 3,811 people, under Scenario 'A'.

3. Scenario B - Hall's Bay

Assuming that the Hall's Bay development proceeds it would be necessary to revise the population projections of Scenario 'A'. The development of Hall's Bay is regarded as a "unique" event, in other words it may happen at any time during the planning period, but its impact will only be felt over the two year development time period. For example we could recalculate the population projections assuming that Hall's Bay will go ahead in 1985.

From Scenario 'A' 1985 population is 3,622

1985 population	=	3,622	
add 0.85 % annum growth	= +	31	
add 1st year Hall's Bay	= +	220	= 3,873
1986 population	=	3,873	
add 0.85% annum growth	= +	33	
add 2nd year Hall's Bay	= +	220	= 4,126

After 1986 population grows at 0.93% per annum. Increase 1986-1991 equals 0.85 x 6 years = 5.1%

1986 population 4,126 x 5.1% = 4,336

1991 population (with Hall's Bay 1985) = 4,336

Therefore, the net effect of Hall's Bay being developed by 1985 would be an increase of 525 people over the planning period. (Projected population 1991 of 4,336 under Scenario 'B' as compared to 3,811 under Scenario 'A'.)

4. Conclusion

The advantage of treating the development of Hall's Bay as a "unique" event is that it allows the Scenario 'A' population projection to be adjusted no matter when the development takes place.

F HOUSING

1. Housing Stock and Tenure

The Town of Springdale's housing stock as of September 1981 consisted of 921 dwelling units. Table 13 below shows the growth in Springdale's housing stock over the period 1966 to 1981.

TABLE 13

OCCUPIED DWELLINGS BY TENURE

TOWN OF SPRINGDALE

1966, 1971, 1976 & 1981

	1966[1]		1971[1]		1976[1]		1981[2]	
TENURE	No.	%	No.	%	No.	%	No.	%
Owned	443	84	525	78	680	83	N/A	-
Rented	85	16	145	22	140	17	N/A	-
Total	528	100	670	100	815	100	921	100

Source: [1] Statistics Canada, Census of Canada 1966,1971,1976

[2] Provincial Assessment Office, Dept. of Municipal Affairs & Housing

Over the fifteen year period 1966-1981 the total number of dwellings increased by 393 units for an average annual increase of 26 units. A high proportion of dwellings are owned, approximately 80% percent, compared to only 20% rented. Between 1971 and 1976 the actual number of dwelling units that were rented declined from 145 units to 140. Although figures on tenacy were not available for 1981 it is assumed that the present tenure patterns would show a similar relationship between owner occupied and rental units.

2. Breakdown by Structural Type

Table 13 shows the breakdown by type of dwelling unit for the Town of Springdale in the year 1976. Of the total 815 dwelling units, 655 or 80% of the housing stock, consisted of single family detached dwellings.* The next largest segment of the housing stock were duplex dwellings which accounted for almost 12% of all dwellings. Apartments accounted for the third largest segment at 5.0% of the housing stock.

It is anticipated that the breakdown by structural type for the 1981 total of 921 dwelling units would be very similar to the 1976 figures.

Also over the planning period to 1991 it could be estimated that the composition of Springdale's housing stock, in terms of structural types, will remain close to the 1976 breakdown. Single family dwellings will continue to form the largest segment but there could be a move towards higher density housing types, such as semi-detached and apartments, as energy costs rise and developable areas become more scarce.

3. Occupancy Rates **

Average household sizes are available from the Census for the year 1971, 1976 and 1981. In 1971 the average household size in Springdale was 4.8, by 1976 the average number of persons per household had decreased to 4.3 persons. For 1981, it decreased to 3.6?. Table 15 shows the variation in average household size by housing type.

* Statistics Canada defines "duplex" as two dwelling units, one on top of the other. "Double house" is defined as two dwellings attached side by side, separated by a common wall.

** Statistics Canada, Census of Canada, 1971, 1976, 1981.

TABLE 14
OCCUPIED DWELLINGS BY STRUCTURAL TYPE
TOWN OF SPRINGDALE
1976

	TOTAL OCCUPIED PRIVATE DWELLINGS	SINGLE DETACHED	SINGLE ATTACHED			ATTACHED TO NON-RESIDENTIAL STRUCTURE	APARTMENT	DUPLEX	MOBILE
			TOTAL SINGLE ATTACHED	DOUBLE HOUSE	ROW HOUSE				
Total	815	655 (80.4%)	20 (2.5%)[1]	15 (1.8%)	5 (.6%)	5 (.6%)	40 (5.0%)	95 (11.7%)	5 (.6%)
Owned	680	620	15	15	-	5	5	40	-
Rented	140	40	5	-	-	-	35	55	5

Source: Statistics Canada, Census of Canada, 1976

NOTE: [1] Figures in brackets equal percentage each structural type represents of total dwellings.

Figures may not add due to random rounding.

RF35

TABLE 15

AVERAGE NUMBER OF PERSONS IN OCCUPIED
DWELLINGS BY STRUCTURAL TYPE AND TENURE
TOWN OF SPRINGDALE
1976

	TOTAL OCCUPIED PRIVATE DWELLINGS	DOUBLE HOUSE	ROW HOUSE	TOTAL SINGLE ATTACHED	SINGLE DETACHED	APARTMENT	DUPLEX	MOBILE
Total Occupied Private Dwellings	4.240	3.706	-	3.429	4.478	3.025	3.351	200
Owned	4.468	3.400	-	3.438	4.519	4.333	4.220	-
Rented	3.130	600	-	3.400	3.854	2.919	2.714	-

Source: Statistics Canada, 1976

NOTE:

* Average number of persons in occupied private dwellings in 1981 is 3.67

Source: Statistics Canada, 1981.

Given the trend, both nationally and provincially, towards smaller household sizes an occupancy rate of 3.67 persons per dwelling unit is used for the purpose of projecting future dwelling unit requirements.

4. Demand

Table 16 shows the estimates of Housing Demand for the two population scenarios formulated in Section E of this Report. The Table also shows estimated demand using two occupancy rates to illustrate the effect of the trend towards smaller household sizes on the total number of dwelling units required to house a given population.

(a) Scenario 'A' - No Hall's Bay Project

Under Scenario 'A' Springdale's projected population for the end of the Plan period (1991) is 3,811. Using an occupancy rate of 4.0 persons per dwelling unit the projected population would require 953 dwelling units. Therefore, an additional 32 dwelling units would be required over the 1981 total of 921 units, or an average of 3.2 new dwelling units per year. With an average person per unit figure of 3.67 the total number of dwelling units required by 1991 would be 1,038, or an average of 12 new dwelling units per year.

(b) Scenario 'B' - Hall's Bay Project Proceeds

Under Scenario 'B' the projected population for Springdale in 1991 is 4,336 people. Using an occupancy rate of 4.0 persons per dwelling unit the projected population would require 1,084 units. Therefore, an additional 163 units would be required over the 1981 total, or an average of 16 units per year.

Using the lower household occupancy rate of 3.67 persons the number of dwelling units required in 1991 would be 1,181 or an average of 26 new units per year.

TABLE 16

ESTIMATE OF HOUSING DEMAND

TOWN OF SPRINGDALE, NEWFOUNDLAND

POPULATION ESTIMATE	NUMBER OF DWELLING UNITS ASSUMING OCCUPANCY RATES OF	
	3.67 P/DU	4.0 P/DU
1986		
Scenario 'A' 3,653	995 (14.8)	913 (-1.6)
Scenario 'B' 4,126	1,124 (40.6)	1,031 (22)
1991		
Scenario 'A' 3,811	1,038 (12)	953 (3.2)
Scenario 'B' 4,336	1,181 (26)	1,084 (16)

Note: This analysis assumes that there are 921 DU at September 30/81. Figures in brackets are average number of new units required annually to accommodate 1981 and 1991 population.

5. Housing Market

In order to assess the level and nature of activity in the housing market in Springdale an interview was conducted with a local real estate agent. As of October 1981 the real estate agent estimated that 20-25 residential properties were on the market either through listing with an agent or by private sale.

The average selling price of a house was estimated to be in the $35,000 to $40,000 range. However, the turnover rate at this price was slow as, over a 1½ year period, the agent had sold only 1/3 of listed properties. The nature of activity in the housing market is that most sales are to families moving into Springdale rather than resdidents within the Town trading into new homes.

The real estate agent interviewed felt that there was a strong demand for rental accommodation due in part to the presence of vocational school students. A small apartment complex would be ideal to meet their demand in the agent's opinion.

Overall the level of activity in the housing market in Springdale could be characterized as relatively slow with the majority of sales to people moving into Springdale. There also seems to be a need for a small apartment complex to satisfy the apparent demand for rental accommodation. This need could also be accommodated by allowing basement apartments which provide acceptable standards of space, light and air.

6. Supply of Residential Lots

The following is an estimate of residential lots available within the Town boundaries. Lots are divided into :

(1) those in existing subdivisions
(2) infilling potential
(3) proposed subdivisions

whether or not the lots have existing services or are potentially serviceable is also indicated.

(1) Existing Subdivisions

(a) NLHC " LIttle Bay Road Subdivision"

52 lots are "developed" (i.e. survey numbered)

of these 52 lots - 27 have been sold

- 25 lots are vacant

All 52 are fully serviced

In NLHC land assembly there are sufficient vacant lands to to accommodate a further 29 lots

∴ Total of vacant lots = 29 + 25 = 54 lots

(b) Pelly's Subdivision (Beside Trailer Park)

Total 18 lots

7 existing homes

∴ 11 vacant lots - these lots are serviced

(c) Trailer Park

21 lots

11 existing mobile homes

10 vacant lots - these lots are serviced

(2) Infilling Potential

Note: Refer to existing land use maps in reference numbers areas of infill potential

(a) East End (See Map 4-1)

LOCATION	INFILL POTENTIAL	COMMENTS
East of Town's Tot Lot	10 - 15 lots	problem might be slope drainage, good land along Main Street
Across from Sullivan's Lane	1 - 2 lots	
Landfill beside G. Bay Primary School	25+	excellent flat land, could put in subdivision. Need to extend services from Main Street
West of Dalley's Store	10 lots	

(b) Central Area (See Map 4-1)

Behind Funeral Home	2 lots	large vacant property
Area behind boat repair yards	1 lot	
Area beside vacant food-liner	1 - 2 lots	
Area beside G. Bay Intergrated S. Board Offices	2 - 3 homes	
Area east of subdivision behind S. A. Church	6 - 8 lots	flat land, problem with lotting off of road
TOTALS	56 - 69 lots	

(3) Proposed Subdivisions:

East end north side of Main Street, beside old S.A. Cemetery

Proposed 19 lots

SUMMARY

Grand total of existing subdivisions, infilling, proposed subdivision

= 150 - 163 lots

SUPPLY AND DEMAND:

Given estimated potential of 150-163 lots (say 155) this can be compared to estimated demand from Part 5 of Section F for 1986 and 1991.

Evaluation of the relationship between current supply and future demand for 1986 and 1991 establishes the following relationship for Scenario "A" & "B" :

Scenario "A" - No Halls Bay Development

	Assume 3.67 Persons/DU	Assume 4.0 Persons/DU
Number of new lots required by 1986	74	155
Potential Supply 1981	155	155
Supply remaining (Required) 1986	81	163
Number of new lots required 1991	117	32
Supply remaining (Required) 1991	38	123

Scenario "B" - Halls Bay Development takes place in a specific year. For the purpose of this report, it is assumed that Halls Bay would be developed in 1985 and 1986 and that it would continue to operate at least until 1991.

	Assume 3.67 Persons/DU	Assume 4.0 Persons/DU
Number of new lots required by 1986	203	110
Potential Supply 1981	155	155
Supply remaining (Required) 1986	(48)	45
Number of lots required 1991	260	163
Supply remaining (Required) 1991	(105)	(8)

The significance of these results is that if there is no Halls Bay Development, or if it were not to occur until after 1991, there is sufficient land devoted to residential uses within and adjacent to the existing built-up areas of town to provide more than an adequate supply of building lots.

However, if for instance, there were to be a Halls Bay Development within the planning period, it would require that 105 additional lots, over and above the 155 lots potentially available in town in 1981, would have to be developed. At 3.67 persons per household and at a density of 12.0 Dwelling Units per hectare, which is similar in density to the Newfoundland and Labrador Housing Corporation subdivision, a maximum of 8.75 ha of land would be required. By way of example, if developed in a single project, the additional 105 lots would occupy an area similar to that of the Vocational School site.

7. Future Commercial Floor Space Needs & Proposals for its Location

Based on the work done by Dr. Henry R. McCutcheon* on the Retail Trade Sector of northeastern Newfoundland, Springdale is included in the Grand Falls Trade Area and serves as a sub-regional trade centre which has grown in importance as the highway network has developed and improved. Current work by DeLCan indicates that Springdale must compete with both Grand Falls and Corner Brook for the consumers comparison goods shopping dollar.

In 1951, Springdale had 11 retail establishments which performed 3 different functions, i.e., general store, grocery store and a lumberyard. By 1961, there were 23 retail establishments and 10 different functions. By 1971, there were 38 different establishments providing 15 different functions and in 1981, there were 60 establishments providing 15 functions.

As noted elsewhere in this Report, Springdale's Trade Area is approximately 10,500 people. Personal Disposable income per capita for the central portion of the Province is $5,442 of which $572/capita is available to be spent on food and $1,597/capita is available to be spent on department store type merchandise (DSTM).**

This represents buying power of over 57 million dollars with approximately 6.0 million dollars available for food purchases and 16.8 million dollars available to purchase DSTM or comparison type goods.

On the basis of a survey of commercial floor space carried out by DeLCan in October of 1981, there was approximately 44,800 square feet of floor area in food and approximately 50,600 square feet of DSTM space.

* McCutcheon, Dr. Henry R., Growth and Spatial Change in Tertiary Economy of Northeastern Newfoundland. 1951-71.

** Financial Post, Canadian Market 1982

A residual analysis technique which compares the potential retail sales against current estimates of sales on a $/unit floor area basis was used to determine the potential sales available if one were to enter the Springdale market. It is found that when one uses the shopping centre developer's start up sales guideline of $125.00 per square foot for DSTM type sales and $235.00 for food and one assumes that 80% of the buying power will be spent in Springdale, there is an over supply of approximately 21,000 square feet of floor space devoted to food sales and a potential to develop approximately 60,000 square feet of DSTM space.

When one considers that Springdale has to compete with Corner Brook and Grand Falls for the comparison shopper's dollar the opportunity to develop additional DSTM floor space may be misleading as the probability of people buying comparison type goods in Springdale decreases as one goes towards the Trans Canada Highway side of the Trade Area.

The significance of these findings is that it is unlikely that there will be pressure to develop another food store in town.

With respect to the probability of adding additional DSTM type merchandise, it is felt that even with the relatively long distance involved, the competition from Corner Brook and Grand Falls would be too great, as the need to travel to the larger centre for certain goods and services and the desire to have additional variety in terms of goods and services will reduce the probability that the buying power which exists in the Springdale Trade Area will be spent in Springdale. This has the effect of reducing the demand for additional DSTM.

The significance of this preliminary analysis is that, at present, there is no need to consider allocating large amounts of land for the types of retail commercial use that one finds in the Springdale Town Centre. Instead, if Council wishes to take positive action,

it should adopt policies and develop a program which continues to favour the improvement of the physical environment of the existing Town Centre. This would require that the Municipal Plan define the extent of the Town Centre, and contain policies with respect to its role and function in the community, housing in the Downtown, traffic and transportation, the preservation of existing properties as well as the possibilities of mixed use i.e., commercial, residential, etc.

With respect to the development of additional retail commercial floor space of the type that is available in Downtown Springdale, it is important to consider several factors. Unless there is significant growth in real terms in buying power in the Trade Area, the addition of stores and shops which sell the same type of goods and services that are already available in Springdale, will only cause a redistribution of market share resulting in existing businesses becoming less viable. The addition of shops and services which provide items or quality that is not available in Springdale now may represent an opportunity for the entrepreneur. However, it is felt that given the wide range of goods and services available in Springdale, the opportunity for adding new lines of goods and services is quite limited.

Springdale has already experienced the development of a downtown shopping mall, and it is recognized that the types of shops and services which locate in a shopping centre tend to provide the same type of goods and services which are already provided by existing merchants in the Town. As well, the shopping centre usually represents the addition of a large amount of floor space into a trade area. As stated previously, unless the shopping centre is providing for a market that is presently unserved, this addition of food and DSTM will solely cause a redistribution of market share within the trade area resulting in decreased viability operations.

A further point is that because of the location of the existing Town Centre, the existing shops and services are vulnerable from the development of a large amount of shopping space at any site between it and the Trans Canada Highway. If, for example, a shopping centre offering the same type of goods and services which are provided at present in Springdale, were to locate at the intersection of Routes 390 and 391, and if the experience in many communities which have allowed the development of a peripheral mall, is repeated in Springdale, the existing Town Centre will be made less viable and if the experience of other communities is repeated, the community will be burdened with a Downtown which will have a lowered assessment and will generate less tax revenue while it still needs to be maintained.

Based on these facts, it is necessary that Council adopt a policy which tends to improve the viability of existing businesses in the Downtown area, that it evaluates the retail market effect of proposed new large scale retail development and satisfy itself that the goods and services provided in Springdale, and that the location of such major retail development will reinforce the viability of Downtown Springdale.

G COMMUNITY SERVICES AND FACILITIES

1. Churches

At present there are 5 churches in Springdale of the following denominations: Jehovah's Witness, Anglican, Pentecostal, Salvation Army and the United Church. With the exception of the Jehovah's Witness' Kingdom Hall located in the east end all of the churches are centrally located.

2. Hospital*

The Springdale Hospital is located on Main Street in the east end of the Town. At present the hospital has 31 beds and 4 general practitioners and 1 surgeon on staff. The hospital serves the Green Bay area, from Harry's Harbour in the north to Triton in the south.

The hospital provides acute care (i.e. heart attacks) and handles minor surgery. Major surgery or serious illnesses are sent to the regional hospital in Grand Falls. Most patients are only in the hospital for 3½ - 4 days on an average. The hospital's staff also provides health care services for the Valley Vista Senior Citizen's Centre. Ambulance service is provided by the hospital within the Green Bay area.

In terms of capacity the hospital generally has 70% of its beds occupied. It was felt that an additional 15-20 beds are required but there are no plans at present for expansion.

3. Police Protection **

Police services for Springdale and area are provided by the Springdale

* Telepone interview conducted by DeLCan with Hospital Administrator

** Information from telephone interview conducted by DeLCan

detachment of the R.C.M.P. The area covered by this detachment runs from the Baie Verte Junction on the Trans Canada Highway in the north down to Triton in the east. At present, there are 6 officers providing police services.

The existing facilities consist of a garage, married quarters, detachment offices and a 2-person cell block . Within the next year a two-man highway patrol unit will be added to the detachment to cover the same geographical area as at present.

4. Fire Prevention & Supression Services

A volunteer fire brigade operates in the Town of Springdale. The volunteers use a 1962 (Dodge) La France two stage, triple combination pumper with a 2300 L (500 gallon) tank which, according to the Fire Underwriters Survey carried out in August of 1980, is in satisfactory condition. The Fire Underwriter's Survey, which is financed and directed by the Insurance Bureau of Canada and which provides the gradings upon which fire insurance rates are set for a particular community, provided the Town Council with a list of recommendations. These range from improved record keeping about the operation and maintenance of the water works system, and the various pieces of apparatus, improving the Fire Service Communication system, hiring a qualified person to be in charge of inspection, enforcement of the building code, to obtaining an additional triple combination pumper.

5. Public and Institutional Buildings

Buildings include the Town Office, the Post Office, Fire Hall, Provincial Court and office buildings and Federal Offices. Other institutional buildings include some halls and social clubs such as Masonic Lodge, Golden Years Senior Citizen's Club (in basement of Masonic Lodge), and the Royal Canadian Legion. These buildings function as more of a commercial use and future expansion of this type of use should be separated from residential areas due to noise and traffic.

Another public building is the Springdale Library located in the new Town Hall. The library has been established since 1945. The present library has 830 square feet of space and 8,000 books. The library is going to expand downstairs into another 830 square feet of space. At present there are 1,285 registered card holders, the majority from within the Town. Memebership is increasing at the rate of approximately 150 people per year.

6. Schools

Table 17 lists the schools located in Springdale and shows the enrollment, numbers of classrooms and grade structure. Unfortunately, enrollment figures in the 1975 Municipal Plan were not broken down between the two school boards, so detailed comparisons cannot be made with 1981 figures.

The total 1975 enrollment for the Integrated and Pentecostal schools was 1,252 students according to the 1975 Municipal Plan. The total 1981 enrollment is 1,242 students, a decline of 10 students overall. This decline reflects the decreasing proportion of the school age population identified in Section C of this Report.

(a) Integrated Board

In terms of enrollment trends, the total number of students is remaining fairly constant. Green Bay Primary has experienced a slight drop in Kindergarten pupils in 1980-81. Also with the Province wide introduction of Grade 12 in two years time, Grant Collegiate will have an additional 40 to 50 students.

TABLE 17

EDUCATIONAL FACILITIES

TOWN OF SPRINGDALE

1981[1]

NAME OF SCHOOL	CLASSROOMS	PUPILS	GRADES	CAPACITY
Integrated Board				
Green Bay Primary	7	150	K - II	175 - 180
Green Bay Elementary*	9	260	III - VI	220 - 240
Grant Collegiate	21	351	VII - XI	425
Pentecostal Board				
Charisma Little Bay Academy	13	230	K - VI	245
Charisma Collegiate	13	251	VII - XI	251
Green Bay District Vocational School	16 classrooms	109 Trade School		109 Trades
	7 shops	545 Pre-Vocational		600 Pre-Vocational

NOTE: *Green Bay Elementary enrollment includes 9 studens in mentally handicapped program located in Integrated Board offices.

1 Source: Telephone survey of School principals by DeLCan, Sept. 1981.

Capacity in relation to enrollment varies from school to school. Green Bay Primary's enrollment is slightly below its capacity. However at present it only goes to Grade 2 while the intent is for Grade 3 to also be located there. Green Bay Elementary is presently 30 - 40 students over its capacity. Both Green Bay Primary and Elementary suffer from lack of adequate playground facilities. Both buildings are fairly old and in need of some repairs and replacement. Grant Collegiate is operating below capacity and will have no problem handling the increased enrollment associated with the introduction of Grade 12.

All of the Integrated Board schools draw the majority of their students from the Town itself. However, the percentage of out-of-town students varies from school to school. Ninety-nine percent of Green Bay Primary's pupils are from the Town, of these students approximately 95% are bussed to school. For Green Bay Elementary 95% of the students are from Springdale, of which only 40% are bussed. The other 5% of the pupils are bussed from the Baie Verte Junction area. Only 65% of Grant Collegiate's pupils are from the Town which reflects the wide geographical area from which high schools draw their students. Of the "in-town" students approximately 65% are bussed. The "out-of-town" students come from Little Bay area (20%) and South Brook (15%) and are bussed in by the school board.

The higher percentage of "in-town" students that are bussed to all three integrated schools reflects the linear configuration of Springdale. However, care should be taken when locating future schools to find a site close to concentrations of residential development in order to minimize bussing of students. Furthermore, approval of new housing developments should tend to be in areas from which students will not have to be transported.

(b) Pentecostal Board

Enrollments at both the elementary and high school have been steady over the last 5 years. There was a slight decline in the high school enrollment 1980 to 1981 but this was the first decline in 5 years.

In terms of capacity both the elementary and high school are operating close to capacity. In order to accommodate the increased enrollment associated with Grade 12 another classroom will have to be added to Charisma Collegiate. The elementary school also would require more classroom space to handle any large increases in enrollment. However, the original intention was to locate the elementary school on the same site as the high school. Therefore, a new school may be constructed within the planning period. A new elementary school would also solve Charisma Academy's present problem of lack of adequate playground facilities.

Ninety-five percent of Charisma Academy's pupils are from within Springdale, of these approximately 40% are bussed. For Charisma Collegiate "in-town" students comprise 67% of the enrollment and of these students 71% are bussed. The high percentage of "in-town" students bussed to the high school reflect its location in the west end of Town. Of the 33% "out-of-town" students the majority come from South Brook with the rest from Little Bay areas.

(c) Green Bay District Vocational School

The 1981 enrollment of the vocational school has increased by 10-15% over 1980. It was felt that enrollment in the trades school would continue to increase but at a slower rate than 10%. Pre-vocational enrollment will likely remain stable.

The 109 trade students represent full capacity, while the 545 pre-vocational students are less than the 600 student maximum enrollment. There are no plans to expand the vocational school though the addition of a mining college was mentioned in the 1975 Municipal Plan.

About 45% of the students at the vocational school come from the Town itself, the rest come from Harry's Harbour, Beachside, Little Bay and Triton areas. The school does not provide any transportation so "out-of-town" students must provide their own transportation or find accommodations within Springdale.

(d) Pedestrian Circulation

The location of both Green Bay Elementary and Charisma Academy on Main Street in the centre of Town creates a potential conflict between pedestrian (small children) and car traffic. In the morning, at noon and at the end of the school day a large number of students walk along the side of Main Street. The potential for conflict is increased by the narrow width and poor definition of the road shoulder along with the lack of sidewalks. If these two schools are to remain in their present locations then the pedestrian facilities should be significantly upgraded.

6. Recreation Facilities

Municipally owned outdoor facilities include a soccer field and baseball diamond beside Grant Collegiate. The baseball diamond is not regulation size and the Town is negotiating with the Integrated School Board to acquire school property to upgrade the diamond. The soccer field is used by the high school as well as for community leagues. Also located beside Grant Collegiate is the Town's swimming and wading pools. The swimming pool is 15 years old and although the concrete wall around the pool was repaired recently the pool is in poor shape. The Town also owns two playgrounds or tot lots, one is adjacent to the swimming pool and the second is located in the east end of Town beside Green Bay Primary School.

Other Town owned outdoor recreation facilities are the two campgrounds located outside of Springdale. Indian Falls Park is a campground located at Indian Falls just off Highway 390. The other campground is the trailer park on Davis Pond just off Highway 392.

(b) Indoor Facilities

Municipally owned indoor recreation facilities are located within the Springdale Stadium. This facility was built in 1972 and is located on Grant Street in the west end of the Town. The stadium contains a regulation size ice rink with a seating capacity of 1,200. The rink is used primarily for hockey and broomball in the winter and mainly by local residents and leagues. Not much ice time is booked by people in the Green Bay area. The ice rink is not fully booked during the winter months and as a result does not generate enough revenue to pay for maintenance costs. In fact over the 1980-81 year maintenance cost the Town $33,000. During the summer the ice rink converts into a tennis court but it is not used very often. Perhaps the development of a Tennis Club, with an instruction program would overcome this problem as well as providing a healthy outlet for young and mature citizens.

Also located in the stadium is the Springdale curling club with two sheets of ice, a lounge and kitchen facilities. Upstairs above the rink and curling club is Manuel Hall, a community hall, used for the Lion's Club and community events (i.e. dances, meetings etc.).

(c) Other Lands

The Town also owns a 8 hectare (19.6 acre) parcel of land on the east side of Highway 390 directly opposite Indian Falls Park. The land has been cleared but not sodded, and the proposed use if for a softball diamond and soccer field. However, it will cost approximately $100,000 to sod the field and its distance from Town and problems with insects in the summer time are definite drawbacks for recreational use of the property.

(d) Recreation Committee

A Recreation Committee, composed of two Town Councillors, the Town Manager and representatives from the various leagues which use the facilities, oversee the Town's recreation facilities. In addition to the Committee the Town also has a recreation director and a stadium manager who is responsible for the upkeep of the stadium.

(e) Community Use of School Facilities

All schools contacted stated that community use of school facilities after hours was permitted. The gym at Green Bay Elementary is booked for use by community groups every night of the week ranging from air cadets, church groups to weight watchers. The gym at Grant Collegiate is usually occupied by high school sports activities after hours but when available it is used by community groups. The 400-seat auditorium in the Collegiate is used on occasion by community groups for plays and concerts.

The Pentecostal schools are also available for community use. However, Charisma Collegiate's facilities are not being extensively used at present and most of the after hours use of Little Bay Academy is by Pentecostal church groups.

The Vocational School's classrooms are used occasionally by community groups for meetings or seminars.

7. Cemeteries

The Town of Springdale has a total of 7 cemeteries, of which 4 are still in use. In the extreme east end of Town there is an old, unused Salvation Army cemetery. Another cemetery, of the same denomination, is just off the main street, east of Kingdom Hall.

The old United Church cemetery is located just behind Warr's storage building in the central part of Town.

The cemeteries presently used are the Pentecostal, beside Grant Collegiate in the west end, the United Church, Salvation Army and Anglican cemeteries situated on Cherry Crescent.

The latter 4 cemeteries are considered to have sufficient space for the duration of the Planning Period.

H. TRANSPORTATION

1. Road

Springdale is situated 11 km rortheast along Highway 390 from the Trans Carada Highway which forms the western boundary of the Planning Area. The Town is almost equidistant from Port aux Basques and St. John's. other major roads within the Planning Area are Highway 391 which runs north from Highway 390 to King's Point, Birchy Cove and Harry's Harbour. Highway 392 runs northeast from Highway 390 and passes through St. Patrick's, Little Bay and Beachside. Highways 390, 391 and 392 are all two-lane paved roads and are in good condition.

Highway 390 intersects the Trans Canada Highway at the section between South Brook and Old Baie Verte road. According to a Provincial Study the capacity of this section of the Trans Canada Highway is adequate beyond the year 2000. However, in terms of pavement conditions the roadway was classified as reaching a state of pavement quality deficiency by 1981.* Possible improvements to the Trans Canada Highway include work on the 390/Trans Canada Highway intersection.

Terra Transport provides bus service to points east and west of Springdale. There is one bus daily in each direction, to Port aux Basques and to St. John's. The bus stops at the Highway 390 intersection and does not provide direct service into Springdale. No feeder bus or taxi service is available.

2. Air

(a) Facilities in Planning Area

An airstrip was constructed 11 km (7 miles) west of the Town of Springdale in 1972. It is approximately 6 metres (20 feet) above sea level and there is one gravelled surface runway. It was originally 610 metres (2,000 feet) but subsequently lengthened to 762 metres

* Nfld. Department of Highways "Needs Study - Primary Highway System" Highway Planning Research, 1980

(2,500 feet). It is 23 metres (75 feet) wide. In 1981 lighting was made available upon request. The unlicenced airstrip is operated by the Government of Newfoundland and Labrador.*

There are no plans at present to upgrade the status or conditions of this airstrip.** It is important to ensure that the area surrounding the airstrip is kept clear of uses which would hamper its enlargement in the future.

There is also a float plane base at Davis Pond, out of which small charter service operates. Most flights are associated with charter hunting or fishing trips.

A heliport is proposed on a site just south of where Davis Brook crosses Highway 390. The land is owned by the Town and approval for the heliport has been given by the Provincial Department of Transportation who will regulate its operation. The heliport will be built by the Provincial Department of Transportation as soon as funding is available, probably early in 1982.

(b) Commerical Air Carriers

At present Deer Lake Airport, 127 km to the west of Springdale, is the closest airport with commercial flights to points within the Province and connections to out-of-Province flights. The next closest major airport is Gander, 193 km to the east and Stephenville, 274 km to the west.

At one time, Labrador Airways was considering establishing a service to the Springdale area using the existing Provincial airstrip (upgrading would be required). However, there are no concrete plans on the part of Labrador Airways to institute this service, it is only under preliminary consideration .***

* Smallwood, J. R., Encyclopedia of Newfoundland & Labrador 1981

** Telephone interview by DeLCan with Director of Air Services, Nfld. Department of Transport, October 1981

*** Telephone interview by DeLCan with President of Labrador Airways Limited, October 1981.

3. SEA*

A Government Wharf is located in Springdale. The wharf is a "finger pier", 125 metres long by 12 metres wide with a concrete deck. The sustained load limit is 300 lbs. per square foot with a concentrated load limit of 15 tonnes. The water at the end of the pier is approximately 11 metres deep.

The wharf is used for a number of purposes. Imperial Oil has a pipeline running down to the wharf from their storage tanks for the off-loading of oil from small tankers. Large amounts of salt are also off-loaded at the wharf for use by the Provincial Highways Department.

The traffic level is fairly low. During the fiscal year 1979-80 21 vessels docked at the wharf. Of these, 3 boats were general cargo, 2 were dry bulk, 3 pleasure crafts and 13 passenger ferry dockings. Of the 13 passenger ferry dockings, 12 occurred in April due to ice conditions at St. Patrick's where the ferry usually docks. Over the fiscal year 1980-81 only 6 vessels used the wharf, of these 1 was general cargo, 2 were dry bulk off-loads and 3 were salt off-loads.

Other users of the wharf include general fishing vessels, Pelly's outfitting operation and government craft such as Coast Guard boats.

Springdale had been considered for a terminal for the Little Bay Islands ferry service. However, there are, at present, no plans to relocate the terminal from St. Patricks. Reasons for this decision include the greater distance the ferry would have to travel, length of "ice free" period, and overall higher costs associated with the Springdale location.**

*Telephone interview by DeLCan with Federal Dept. of Transport staff October 1981.

**Telephone interview with Water Transportation Assistance Directorate, St. John's, conducted by DeLCan, October 1981

I. LAND RESOURCES

1. Forestry Resources*

Springdale Planning Area falls within the Department of Forest Resources and Lands, Forest Management Unit 9. Unit 9 consists of 619,000 hectares of land so the Planning Area only comprises of a relatively small portion of the Unit. Approximately 1,300 hectares fall within the Planning Area boundary.

Within the entire Unit 9, forest accounts for 52% of the land area. Of the logging activity for the year 1979-80, 93% was pulpwood production, 4.5% was fuelwood production, 2% was sawlog and 0.5% was construction timber production. One interesting statistic is the increase in cutting for fuelwood production which was up 23% over the 1978-79 levels due to the conversion of heat sources from oil to wood.

Within the Planning Area itself approximately 2/3 of the timber ownership belongs to the crown while the western 1/3 is owned by Abitibi Price. Also the southwest corner of the Planning Area is designated by the Department of Forest Resources and Lands as an Intensive Forest Management area. These Management areas are lands on which rehabilitation or management programs are either in place or proposed. Programs include planting, fertilization, thinning, and scarification depending on the condition of the site.

2. Mineral Resources

(a) Aggregates

Within the Planning Area there is a large amount of land with identified aggregate deposits. A broad arc of land, which starts just north of the Town and extends northwest then swings southwest to the inter-

Source: *Department of Forest Resources & Lands

section of Highway 390 and the Trans Canada Highway, is classified by the Department of Mines and Energy as Class I. Class I lands are those known to contain usable granular materials. The probability of locating economic deposits range from moderate to high. A large amount of land within the Planning Area is designated Class 3. These are areas that may contain usuable granular materials but actual deposits have not been confirmed by field investigations. The probability of locating economic deposits on Class 3 lands is moderate to low.

Given the potential for the construction of concrete drilling platforms at Hall's Bay, an activity which would require large amount of aggregates, the areas of granular deposits within the Planning Area should be protected for future extractive operations.

(b) Minerals, Metallic and Non-Metallic

There has been a history of mining in the Springdale area although most mines have shut down in recent years. Within the Planning Area itself there are a number of mineral occurences which where identified under the Canada - Newfoundland Mineral Exploration and Evaluation Program.

In total there are 19 occurences within the Planning Area. The type of mineral found in these deposits is predominately chalcopyrite and pyrite.* Deposits of copper and copper bearing minerals, sphalerite and bornite also appear. None of these deposits are extensive enough or in high enough demand to make their extraction economically feasible at present.

Source:* Nfld. Dept. of Mines & Engery, Mineral Occurence Tables, March 1976.

3. Agricultural Resources

Within the Planning Area there have been large areas of land considered for agricultural development. Approximately 2,065 hectares of land has been classified as suitable for agriculture. Map No. 4 shows the boundaries of the agricultural areas. Within this area 562 hectares have been in production and 114 hectares have been idle. While the balance, while suitable for agriculture, must be converted from forest and scrub land to arable field.

In 1976, the total number of commercial farmers was 3. In a survey recently conducted by the Department of Rural, Agriculture and Northern Development, (see Table 18), there were a total of 3 commercial farmers and 8 small scale commercial farmers.

With the scarcity of suitable agricultural land within the Province and the rising cost of importing fresh produce, it is felt that land suitable for agriculture should be protected from non-farm developments.

TABLE 18

AGRICULTURE WITHIN THE SPRINGDALE

MUNICIPAL PLANNING BOUNDARY

1981

	CF	SSCF	NF	TOTALS
Number of Owners	3	8	37	48
Percentage of Owners	6	17	77	100
Acreage Held	187	489	622	1298
Percentage of Total	14	38	48	100
Crops (ha)	11.9	5.6	4.5	21.1
Percentage of Total	52	27	21	100
Hay (ha)	17.8	37.7	19.4	74.9
Percentage of Total	24	50	26	100
Idle (ha)	11.3	34.8	29.9	76.1
Percentage of Idle	15	46	39	100

CF - Commercial Farmer - $10,000 sales or over

SSCF - Small Scale Commercial Farmer - $2,500 - $9,999

NF - Non-Farmer

Source: Dept. of Rural Argicultural and Northern Development

J. EXISTING LAND USE

1.1 General

Springdale is typical of many Newfoundland coastal communities. The Town is situated on a narrow strip of land hemmed in by hills on the north side and water on the south.

The developed area extends for approximately 5 km (3 miles) with Main Street providing the backbone for development. On the west side, the linear pattern is re-routed northward and development occurs along the access road, Highway 391. On the eastern side development terminates where the Main Street comes to a dead end.

Map 4-2 shows the Planning Area boundary, the Municipal boundary, the agricultural development area, waste disposal site and the intensive forest management area. There is approximately 1,300 hectares of land under intensive forest management, as referred to in Section (I). The incorporated Town of Springdale comprises approximately 1,760 hectares. This represents 16.5% of the Planning Area.

The land use described here deals with the Planning Area excluding the Municipal or incorporated area which is shown at a scale of 1:5000 on Map 4-1.

The developed parts of the Planning Area include a recreational area and seaplane base on the south side of Davis Pond, an airstrip on the east side of the Trans Canada Highway, a Department of Transportation and Communications facility on the south side of Highway 390, an explosives bunker and a farm residence on the south side of the intersection of Highway 390 and Highway 391. A waste disposal site is on the north side of Highway 390. (see Map 4.2).

1.2 Urban Area

The land use analysis provided in this section deals with the urbanized area, or more specifically, the area shown on Map 4-1 - Existing Land Use.

Table 19 indicates the categorization of land uses by area, determined from the existing Land Use Survey conducted by DeLCan in September 1981, and compared to the Existing Land Use Map, 1975.

It can be seen that, with the exception of public uses, the area occupied by each land use type increased since 1975.

Changes in the amounts of each land use are discussed in greater detail under separate headings.

TABLE 19

TOWN OF SPRINGDALE

Urbanized Area

Existing Land Use 1975, 1981

Land Use	1975 Ha.	%	1981 Ha.	%
Residential	92.5	68.8%	110.3	43.8%
Commercial	8.9	6.6%	39.0	15.5%
Industrial	13.2	9.8%	26.3	10.4%
Public	15.7	11.7%	16.0	6.4%
Public Utilities	*	-	0.6	0.20%
Agricultural	*	-	20.2	8.0%
Parkland & Open Space (C-cemetary)	4.1	3.1%	39.4	15.7%
TOTAL	134.4	100.0%	251.8	100.0%

Springdale Municipal Plan Existing Land Use 1975-85

Existing Land Use Survey 1981.

* Land was not designated in 1975 Existing Land Use Tables.

TABLE 20

Comparison of
Land Use Allocation 1975
with Existing Land Use 1981

Land Use	Total Area Allocated Ha.	Land Substantially Developed Ha.	Undeveloped Ha.
Residential	157.2	110.3	46.9
Commercial	23.3	19.0	4.3
Highway Commercial	8.1	19.0	-
Local Commercial	*	1.0	-
Industrial	15.7	26.3	-
Public	23.6	16.0	7.6
Public Utilities	*	0.6	-
Agricultural	*	20.2	-
Parkland & Open Space (C-Cemetary)	41.2	34.9	4.1
TOTAL	269.1	247.3	

Land Designated under Future Land Use Plan 1975.

Existing Land Use Survey.

* Land was not allocated under 1975 Future Land Use Plan

2.0 Residential

Existing residential land use including local streets occupy approximately 110.3 hectares. In 1975 there was approximately 92.5 hectares of land developed for residential housing, an increase of 17.8 hectares over six years.

Gross residential densities for the urbanized area using 1981 dwelling unit totals and 1981 developed residential areas are estimated at 8 units per hectare.

Using average residential densities of 8 units per hectare, the Town's residential land requirement to 1986 was calculated. The projected 1986 population for Springdale is 3,653 (under Scenario A) and 4,126 (under Scenario B). Assuming an occupancy rate of 3.67 persons per dwelling unit, the 1986 population would require 995 units (under Scenario A) or 1,124 units (under Scenario B). This represents an increase over 1981 of 113 units (under Scenario A) or 242 units (under Scenario B).

With a gross residential density of 8 dwelling units per hectare an additional 14.1 hectares (under Scenario A) or 30.3 hectares (under Scenario B) would have to be developed.

The amount of land designated residential under the current plan is 157.2 hectares, undeveloped land is approximately 46.9 hectares.

Therefore, under Scenario A or B, the amount of land designated residential under the 1975 Plan is more than adequate to meet the potential demand.

3. Commercial Land Use

There are three commercial land use categories in Springdale - General, Highway and Local Commercial.

3.1 General Commercial

The Land Use Survey determined approximately 19.0 hectares occupied by General Commercial uses. A large commercial zone is located

or Little Bay Road, directly opposite the agricultural area. Approximately 5 hectares is utilized by General commercial activity with the remaining 12 hectares being largely confined to the main street core area.

In 1975, General commercial use occupied approximately 5 hectares, largely confined to the central or main street area. The remaining 3.9 hectares was comprised of Highway Commercial and Local Commercial land uses.

The existing commercial core or main street area is fully developed and is contained by residential uses. Any additional commercial development on Mainstreet would require redevelopment of existing sites for shopping and transportation activities.

3.2 Highway Commercial

Approximately 19 hectares of highway commercial land are developed. In the previous plan, only 1.2 hectares was developed. The 17.8 hectares that has been developed since the previous plan reflects Springdale's function as a regional centre. it is felt that the demand for highway commercial services has largely been filled. However, if additional land needs to be allocated, suitable undeveloped land is available along Little Bay Road. However, this type of development should conform to the policy suggested in the previous Plan, that is, the "beads on a string" concept of development be used. This implies that all development alongside the Little Bay Road and the other arterials should have access to the road network through service roads or collector streets thus minimizing the number of accesses to the major traffic artery. An example of this is the Residential development in the NLHC subdivision and the development adjacent to the service road in the Little Bay Road commercial area.

3.3 Local Commercial

Local commercial activities are primarily composed of corner stores, scattered throughout town. Approximately 1 hectare of local commercial land has been developed. Sufficient land within future residential areas should be retained for local commercial development.

Although there were only 31.4 hectares allocated to commercial use under the existing Plan, it is possible that some lands designated open space or institutional are actually developed as Highway Commercial.

4. Industrial

Approximately 26 hectares of industrial land are developed. In 1975, approximately 15.7 hectares were occupied. An industrial park, situated on the periphery of town, just southeast of the Indian Brook Falls Park has accommodated most of the recent growth. The park has approximately 12 hectares developed. Negotiations are underway between the owners and the Town of Springdale to purchase this property.

Eight other smaller existing industrial sites are identified, 7 of which are fronting on Main Street. These sites are evenly distributed throughout the town and little of this activity tends to be of an offensive character. Any additional industrial use would have to locate in the industrial area on the periphery of town, as all industrial sites within the built up area of town have been fully utilized. There is one industrial land use in the centre of town, the ESSO Bulk Plant, which over the long run should be removed for safety reasons. This site could be redeveloped for Town Centre activities.

5. Public

Approximately 16 hectares are developed for public use. This classification entails such uses as schools, Town Hall, hospital, post office, and other buildings providing public services to the population.

These two sites provide not only areas for recreational and leisure activities, but also provide an impetus to develop and enhance the Town's tourism potential.

In the policy section of the Plan certain park standards will be adopted. These standards have been derived from national norms and are intended as a guide for the designation and control of parkland.

In 1975, there were only 4.1 hectares of Open Space developed, with almost 41 hectares allocated to this use.

8. Special Use

Only one site has been identified as a Special Use, namely, the former dump site at the extreme east end of Town. It comprises approximately 3/4 of a hectare. This area must have strict control by Council as it is a potential environmental hazard.

In 1975, approximately 15 hectares were developed. In the 1975 Existing Land Use, two sites, approximately 2.5 hectares in total, were considered institutional, whereas in 1981, these two sites were classified as residential. The land use of these sites has changed since the 1975 Plan was adopted.

6. Public Utilities

There are only 3 sites identified as a public utility, namely the transformer sub-station fronting Highway 392; Newfoundland Telephone Exchange located at the intersection of Highway 390 and Main Street; and Newfoundland Light and Power fronting Highway 390.

In the 1975 Existing Land Use, the public utility classification was not incorporated into the map, it was recorded as an industrial use.

These three sites occupy an area of approximately 0.6 hectares.

7. Parkland and Open Space (C-Cemetery)

Parkland and Open Space comprise approximately 39.4 hectares. Also, an additional 2.5 hectares have been identified as cemeteries. The major contribution to this land use in the Indian Brook Falls Park (14 hectares) located just south of the intersection of Highways 390 and 391.

Also located in the midst of a residential area are approximately 3 hectares of Open Space. This area has a sports field, playground and swimming pool, with approximately 0.2 hectares used as a cemetery. This site is southwest of the intersection of Main Street and Highway 390.

The Town of Springdale has access to a regional park, (Indian River Provincial Park) located just west of the Planning Area, on the Trans Canada Highway.

9. SUMMARY

TABLE 21

AREAS DEVELOPED AND UNDEVELOPED 1975, 1981

SPRINGDALE MUNICIPAL PLAN REVIEW 1982

YEAR	Planning Area	Municipality	Map 4.1	Developed	%
1975	10,640	1,760	-	134.4	7.64%
1981	10,640	1,760	1,114	251.8	14.31%

Table 21 shows the land area for 1975 and 1981 contained within the planning area, the municipality and on Map 4.1, Existing Land Use 1981. Over the period of six years, 117.4 hectares were developed for a 6.67% increase in the amount of development or 1.11% per annum.

10. Rural Land Use Planning Issues

The rural part of the planning area is shown on Map 4.2. At present, it contains a variety of activities , i.e., forestry, industry, pulpwood and domestic wood supply cutting, logging and sawmilling, see Map 4.2. As well, there is a large area which has been designated as the Springdale Agricultural Development Area. It is undertood that while designated as such and shown in the Province's Land Use Atlas, the regulations implementing it have not been passed.

The rural part of the planning area is also the site of the Springdale Municipal Sanitary Land Fill, an explosive storage depot, the Department of Transportation's Salt Sheds and Bunkhouse, two airports, several recreational parks and a scheduled salmon river. In addition, the rural area contains the existing water supply area for the Town.

1. Water Supply Areas

Huxter's Pond and Sullivan's Pond are the existing source of water supply for the Town. Neither are legally designated as being the water supply area and it is recommended that the Council take the steps necessary to have the Department of the Environment investigate the necessity of designating these areas as water supply areas. As well, the watershed of Ketches Pond should be considered for a future water supply and be designated as such. Because this watershed extends beyond the boundaries of the existing planning area, an investigation of its suitability as a water supply area should be undertaken and if designated, the planning area boundary should be extended to take in this future water supply.

2. Springdale Agricultural Development Area

The Springdale Agricultural Development Area includes in some of its territory, the western part of the incorporated Town of Springdale. This area contains an existing park - Indian Falls Park, the Industrial Park and Atlantic Analytical Services. It also contains the site of the proposed Springdale Heliport which will be constructed by the Department of Transportation. Because of the existence of the

substantial numbers of non-agricultural land uses, the Agricultural Development Area designation should be removed from all lands within the incorporated area. The Agricultural Development Area which remains should be designated for agricultural purposes to ensure that this valuable resource is protected for future generations.

3. Aerodromes

Aerodromes are defined as unlicensed landing areas. Springdale has a land and a water aerodrome, both of which are in the rural part of the Planning Area.

As described in the Report of Findings, the airstrip, which is located in the Agricultural Development Area, is approximately 762 metres in length and has navigational lights which are available for nightime landings. The fields surrounding the airport are actively being farmed. At present, there is little traffic at this airstrip. If Halls Bay were to develop as the site for building offshore platforms, the airstrip would be of vital importance in providing quick access to the project from the offices of the developers and purchasers of the rigs.

As a result, a development concept plan, which takes into account the need for expansion of the airstrip, should be prepared and all development for lands surrounding the airport should be evaluated according to the Planning Guidelines for the use of land outside Airport Property Boundaries*. This will provide guidance for the protection of the approaches and the navigational aids and telecommunications, prevention of bird hazards and guidance about compatability of the proposed land use and the potential noise from the aircraft. A similar recommendation is made to protect the seaplance base on Davis' Pond.

*Transport Canada
Land Use in the vicinity of Airports
C.A.T.A., Civil Aeronautics,
Document # S - 80 - 4. T.P. 12478

As with the previous airstrip, potential land use conflicts exist between aircraft use and other uses around Davis Pond, including the recreational camping use on the spit of land jutting out into the pond and on the northeastern shore of the pond for recreational cottage use.

K. WATER SUPPLY AND DISTRIBUTION

1. Existing Water Supply System

The overall plan of the system was based on information from the 1975 Municipal Plan update augmented with data from Town officials and onsite reconnaisance. The information gathered is shown on Map. No. 5.

The existing water supply is provided by Lower Sullivan's Pond and Huxter's Pond, both located north of the town. Water from Lower Sullivans Pond is supplied through 2000 m of 200 mm Asbestos Cement (A.C.) gravity main to the east end of Main Street. Huxters Pond water is obtained through a 250 mm gravity main approximately 700 m long to a point on Main Street about 2200 m west of the Lower Sullivan Pond transmission main.

The existing watermain on Main Street, from the east end to Little Bay Pond consists of 2800 m of 2000 mm AC pipe. The Little Bay Road watermain, from Main Street to the NLHC subdivision consists of 1800 m of 200 mm AC pipe. Branch mains are primarily 150 mm pipe, with some 100 mm. There are also smaller diameter copper pipes used to distribute water to specific groups of houses. All users of water, except one, are located at elevations below 30 m.

2. Water Source Capacity

Table 22 shows the estimated water demand and the source capacity for 1981 and 1991 with and without the Halls Bay platform development project. The combined watersheds, (see Map 5.1) can supply on the average, 4.5 times as much water as required in 1991. During prolonged periods of dry weather, runoff could be reduced to as low as 1.91m^3/ha yielding only 725 m^3/d. Even under such conditions, reservoir storage is sufficient for 145 days per meter of drawdown under present conditions and 116 days under maximum 1991 conditions.

TABLE 22

WATER DEMAND AND SOURCE CAPACITY

	1981	1991(A)	1985 (B)	1991 (B)
A. Population	3 501	3 811	3 622	4 336
B. Average Day Demand (A x .34m^3/person)m^3(L/S)	1 190 (13.8)	1 296 (15.0)	1 232 (14.3)	1 474 (17.1)
C. Maximum Day Demand (B x 2)m^3(L/S)	2 380 (27.6)	2 592 (30.0)	2 464 (28.5)	2 948 (34.1)
D. Peak Rate Demand (B x 3)m^3(L/S)	3 570 (41.4)	3 888 (45.0)	3 696 (42.8)	4 422 (51.2)
E. Watershed Area hectare Lower Sullivans Pond 320 ha Huxters Pond 60 ha	380	380	380	380
F. Average Daily Runoff (17.74 m^3/ha* x E),m^3	6 741 (78.0)	6 741 (78.0)	6 741 (78.0)	6 741 (78.0)
G. Factor of Safety (F/B)	5.7	5.2	5.4	4.5
H. Area of Reservoir m^2				
Lower Sullivan Pond	140 000			
Huxters Pond	32 000			
TOTAL	172 000	172 000	172 000	172 000
I. Reservoir Capacity per 1.0 m drawdown (H x 1.0) m^3	172 000	172 000	172 000	172 000
J. Capacity per 1.0 m drawdown (I/B) days	145	132	139	116

*This figure calculated from Stream Flow records for the Indian Brook watershed near Springdale

3. SYSTEM PRESSURES

Since Lower Sullivans Pond (elev 78.0 m) is 10.2 m higher than Huxters Pond (elev 67.8 m), no water flows from Huxters Pond until friction losses in the system from Lower Sullivans Pond to the lower end of the Huxter Pond main reach, 100 kPa (14.5 psi). However, a pressure control valve on the Huxters Pond main prevents flows, until the pressure in the Main Street main drops below 317 kPa (46 psi). It is estimated that the total demand will have to reach 29.5 L/s (390 Igpm) before water will flow from Huxters Pond. This volume is 87% of the 34.1 L/s (450 Igpm) needed to supply Maximum Day Demand.

When the pressure control valve opens, the pressure between Huxter Pond and Main Street should permit the withdrawal of 113.6 L/s (1500 Igpm) of water. Lower Sullivans Pond will supply 29.5 L/s (390 Igpm) throughout the system with a residual pressure of 99 kPa (14.4 psi) at the end of Little Bay Road. Additional withdrawals will reduce the residual pressure to an unsatisfactory level.

4. Potential Improvements

1. System Control Equipment

(a) Control and chlorination equipment for the Lower Sullivan Pond water supply has deteriorated badly. A thorough inspection should be made and chlorination and flow control equipment replaced as needed.

(b) Water flow recorders and reservoir level guages should be installed on Lower Sullivans Pond and Huxters Pond water supply system to permit continuous monitoring of system flow and reservoir levels.

2. Fire Flow Demand

To establish a reasonable level of protection from fire west of Huxters Brook, some means must be employed to overcome the excessive friction losses in the mains. The following alternatives are suggested:

(a) Installation of a booster pump in a by-pass at the lower end of the Huxter's Pond transmission main. This pump could be started either manually or automatically. It should be designed to maintain a slight positive pressure on the suction side so as to avoid either drawing in contaminated water through leaking joints or collapsing the main.

(b) Construction of an auxiliary pumping station in Indian Brook. This system should have an approximate capacity of 2000 USGPM at a total head of 250 feet.

(c) Construction of a 500 m long, transmission main from the pond just west of Huxters Pond. This main would be automatically controlled to operate when residual pressures on Little Bay Road were less than 140 kPa (20 psi). The system should provide 150 L/s (2000 Igpm) at a pressure 790 kPa (110 psi).

3. **System Improvements**

(a) Pipe Sizes

The use of at least 250 mm (10") pipe for all new main construction on Main Street or Little Bay Road and for the necessary replacement of existing mains. In addition all new subdivisions should be looped with 200 mm (8") pipe rather than 150 mm (6").

(b) Completion of Loops

There are two incomplete loops in the water system. One is just below Main Street in the central area and could be completed by installing less than 120 m (400 feet) of main west of Poplar Road. This connection is desirable but not critical since pressure is adequate in the area.

The second is just west of Elm Street and could be completed by installing less than 30 m of main to connect with the Little Bay Road main. This is a priority measure to provide improved fire flow to the school and recreation area.

Wherever feasible, new main should be installed as loops in preference to dead end lines. This will improve reliability of service, as well as improve pressure to users.

(c) Hydrants

Hydrant spacing in the town is somewhat inconsistent with requirements. Convenient fire department use normally calls for a maximum distance between hydrants along streets in congested areas of 100 m (300 feet) and for light residential districts, 150 m (500 feet). Good practice calls for hydrants at intersections, in the middle of long blocks and near the end of deadend streets. Hydrants should be required within large properties having access to fire apparatus.

(d) Correction of Low Pressures in Specific Areas

Certain small groups of houses have been serviced with undersized copper branch lines and they experience periods of low water pressures. If such pressures are low enough to constitute a valid reason for complaint, then a program of replacement of services should be undertaken.

A careful examination of the existing pipe sizes, length of run, number of houses served and elevation will enable the most economical means of upgrading to be selected. In this regard, it is pointed out that the use of copper service pipe smaller than 5/8 inch should not be permitted except where a house is very close to the main.

L. SANITARY SEWERAGE SYSTEM

1. General Description

The main commercial and residential area of Springdale are serviced with a sewerage system.(see Map No. 5). The system is composed mainly of 200 mm (8") to 300 mm (12") diameter asbestos-cement pipe, two main lift stations and two ocean outfalls (No. 1 and No. 2) which discharge untreated sewage into Halls Bay. A third outfall (No. 3) serves a small group of houses on Cedar Lane. The latest outfall (No. 4) services a small subdivision and a trailer park in the east end. Beyond Orange Street to the east, private outfalls, septic tanks and privies are used as a means of sewage disposal.

2. System Evaluation

We understand the existing system, in general, has been functioning satisfactorily since its installation. Although sewage is discharged into Hall's Bay untreated, the outfalls have not presented any significant pollution problems. From a theoretical standpoint, the existing system can accommodate all future developments proposed without any foreseeable difficulties. The only real problem with the existing system is the intermittent overloading of Lift Station No. 1 during periods of heavy precipitation, indicating an undesirably high infiltration rate. Apart from the overloading, this lift station has operated satisfactorily with only minor problems (i.e., clogged impeller, clogged overflow line).

3. Methods of Future Sewage Disposal

In recent years, the disposal of untreated sewage and the consequent real or imagined pollution has become a controversial subject in this Province. In Springdale, the satisfactory past performance of the existing system lends weight to the argument for continuing this type of system. Therefore, it is suggested that future developments in the Little Bay Road area and in the central part of town

can utilize the existing sewerage system. Although the use of a sewage treatment plant to serve the eastern section of the town is generally desirable, the following must be considered:

(1) relatively low-density housing in the eastern of town,

(2) satisfactory performance of the existing outfalls.

(3) high cost, both for capital and current expenditures of treatment plants.

Outfalls discharging into Halls Bay with minimum primary treatment provide by a comminutor-pump designed to screen and shred solids, should give adequate disposal of sewage. The Department of Environment have indicated their willingness to examine requests for new outfalls and to approve such a system when it meets their guidelines for the discharge of raw sewage. In general, the Department prefers centrally located outfalls serving the maximum area allowing the future diversion of raw sewage to a Pollution Control plant, when and if necessary.

4. Sewerage Systems for Future Development

(a) Master Plan

A master plan for the provision of future sewerage systems is an essential requirement in order to avoid property and easement disputes, unsuitable locations for new buildings and interference with previously-laid lines. The potential problems with sewer systems are much greater than with water systems. Sewer construction is subject to constraints of grade, elevation, and the requirement for straight sections between manholes. Therefore preliminary design and layout of the entire sewer system should be carried out, and properties and easements acquired on a continuing basis. Such a scheme would greatly assist builders and developers in formulating acceptable proposals for the approval of Council. In the interim, the future land use plan should show the potential location of sewerage mains in order to preserve them from development and thus keep the options open for their use in the future.

(b) Little Bay Road Developments

The only foreseeable problems would result from the relatively flat sewer gradients required by the level contours of the area. Therefore, the maintenance program for this area necessarily includes a regular schedule for flushing the lines.

However, the addition of sewage flows from the proposed Little Bay Road developments may overload the capacity of certain sections of the sewer system leading to Outfall No. 1. The combination of peak loads, suspected high infiltration rates and lift station discharges, if occurring simultaneously, will very likely exceed the capacity of even a 10-inch main, laid on a flat grade. Therefore those sections of the main which are on relatively flat gradients and which carry most of the sewage originating west of Outfall No. 1, should be carefully checked to determine whether they can provide the necessary capacity. Furthermore, for future developments beyond the Pentecostal High School, alternative methods of sewage disposal should be investigated both from the viewpoint of avoiding system overload and preventing undesirably high sewage concentrations in one location.

(c) East End Developments

Providing sewerage facilities for the east end developments should not pose any major problem from a planning viewpoint. (see Map 5-1).

AREA 1 - A proposed cul-de-sac development off the Taylor Subdivision as well as existing housing in the area can be serviced by extensions of the sewer system to Outfall No. 2.

AREA 2 - The low elevation of housing on Main Street has directed the location of the sewer main to an easement along the rear of the properties south of Main Street. A new subdivision south of Main and existing developments south of Main Street can be connected to a new outfall system.

AREA 3 - The sewer system consists of a sewer main following Main Street servicing existing houses and connecting proposed development south of Main Street with an outfall located at the mouth of Sullivans Brook.

AREA 4 - The third proposed outfall will service a trunk sewer on Main Street connecting new developments north of Main Street and existing houses on Main Street.

All proposed development areas have been planned to permit discharge through a communitor-pump into an outfall into Halls Bay.

(d) New Development Proposals

Provision should be made to ensure that future developments will be compatible with the overall sewerage plan and will conform with acceptable standards of engineering and construction. Thus it is essential that competent professional engineering advice be sought to review new development proposals.

M. STORM DRAINAGE

It is understood that there are no major problems with storm drainage since the culvert for Huxters Brook was increased to 1200 mm (48") diameter.

Where Sullivans Brook crosses Main Street, it has been suggested that relocating the culvert at a lower elevation would help to drain the area immediately upstream, and thus make more land available for building purposes. This matter should be investigated.

A common problem in new subdivison developments is that runoff from high ground collects at the rear of the houses. This problem could be rectified by constructing a drainage ditch at the base of the hill, parallel to the street to carry the runoff away with a culvert discharging towards the salt water. This problem is created when the topography of the land at the rear of houses rises. Surface runoff should be considered prior to the construction of new developments and resolved to the satisfaction of the Town.

Where warranted, and especially for new developments, the necessity for storm sewers should be closely investigated. Requirements for storm sewers will depend on the topography of any particular site and on the type of construction proposed for the development. In general, if the development provides for paved streets and the construction of sidewalks with curb and gutter, then storm sewers will be required.

N. ROADS AND PARKING

1. Roads

Springdale is adequately served by a network of streets connected to Little Bay Road and Main Street. Little Bay Road and the portion of Main Street which serves as the main artery through the town are paved, and maintained by the Department of Transportation. As well, all other local roads are paved and appear to be in good condition.

In conjunction with the layout of building lots, the planned subdivision streets will serve to control housing construction, prevent the erection of dwellings at random and in unsuitable locations, and permit a more rational administration of financecs. New streets, constructed to include water and sewer services, should be built in an orderly sequence so that the maximum benefit may be derived for every length of street and every length of water and sewer main.

Although Springdale has some sidewalks on Main Street, more sidewalks are desirable, and provision should be made to include curb and gutter and storm drainage, especially in the commercial areas.

2. Parking Evaluation

The following discussion is based upon information obtained from a parking survey conducted in the downtown section of the town of Springdale, a commercial floor area survey, and a review of the existing policy for offstreet parking. (Section 16(1) of the Land Use Zoning and Subdivision Regulation for the Town of Springdale).

The parking survey identified 402 existing parking spaces in the downtown area. The existing commercial floor area survey identified a total of 25,791 m^2 of commercial space being utilized. The offstreet parking requirements (Schedule 16(1)) determines parking spaces required in relation to building use.

TABLE 23

PARKING STANDARDS COMPARISON

USE	TOTAL FLOOR AREA(m^2)	EMPLOYMENT GENERATED	# of PARKING SPACES PER EMPLOYEE	ADDITIONAL PARKING REQUIRED (CUSTOMERS)	TOTAL PARKING
Commercial: Stores, Service Stations, amusements	15,168	352[1]	(1 space per 5 employees) 71	352[1]	423
Warehousing[2]	2,652	71	71	-	71
Institutional	3,460	80[1]	80	5	85
Speciality & other Services	4,511	105[1]	122[3]	-	122
TOTAL	**25,791**	**609**	**344**	**357**	**701**

[1] a factor of $43m^2$ per employee was utilized

[2] Regulation 16(1) (3) of the zoning and subdivision regulation was used

[3] one space for every $37m^2$ of floor area was used

Table 23 summarizes the survey data and the requirements of the applicable regulation. The conclusion is that 701 parking spaces should be available, representing a deficiency of 299 parking spaces.

Another estimate can be obtained by assuming that 37 m^2 of commercial floor area per 1 parking space is applicable.* Based on this assumption, then total commercial floor area would require 697 parking spaces.

The previous two estimates suggest that a parking space shortage exist. Therefore, it becomes imperative that regulation 16(1) be more rigorously applied to new development and suitable land should be allocated for parking lot development to alleviate this shortage.

*This factor was extracted from regulation 16(1)(3). It is a liberal multiplier as it does not take into account the employment generated nor the parking space requirement for customers. It is merely an estimate based on all commercial space allocated to warehousing or storage, which is not the case. This estimate should be reviewed as the minimum parking spaces required for commercial activity.

(a) Parking Improvements

Better definition of the Main Street in the Downtown area is needed to achieve the objectives of providing for through traffic as well as for parking. This can be achieved by installing new curb and sidewalks with a 150 m (6 ") face or rolled curb on Main Street from Little Bay Road to Mulberry Street.

At present, 50% of the existing curb and sidewalk needs replacement. Curbs should be set back from the centreline to provide a minimum 5 ft. sidewalk and allow the maximum width of road that can be provided within the existing right-of-way limits. Once this work has been done the following steps should be taken:

(1) A centreline between the driving lanes (yellow) should be painted. Parallel parking spots (white) along the curb should be included. If the width of road permits, parking on one or both sides of the street should be allowed. "No Parking" areas should be signed as needed. In doing the design, careful consideration should be given to the effect of these measures on roadside and roadway drainage. Drop curbs should be provided at the entrance to private off-street parking areas and a curb radius of 8 m (25 ft.) at sidestreets should be made to differentiate parking lots and sidestreets.

(b) Off-street Parking

More off-street parking is needed. This can be achieved by using the land behind the Town Hall and next to the existing parking lot. This land can be created by extending a 1200 m (48") culvert and backfilling the area for a more level space.

Based on the Town's experience and the current shortage of space, new developments in town should require on-site parking with paved, marked parking layouts.

(c) **Truck Parking**

Specific areas on private property will be designated for trucks to discharge goods. Truck loading areas will be signed at the street and no parking will be provided at loading accesses.

3. **One-Way Traffic System**

A one-way traffic system was proposed and rejected by the Council in 1976; it is discussed here again and considered not to be advantageous as the problems stem not so much from lack of capacity, but from the inadequate turning radius at corners and from inadequate amounts of off-street parking for both large trucks and cars.

Operation

- to operate efficiently it is necessary to have 2 complementary streets which would each take one-way traffic. In Springdale, only Main Street and Bayview Avenue meet this criteria. main Street and Bayview Avenue could become one-way-east bound from Simms Street to Juniper Street and Bayview Avenue one-way westbound from Juniper Street to Simms Street.

Disadvantages

- the system would require all traffic for the Government Wharf to pass through the town centre creating congestion to Juniper Street

- Bayview would have to be improved to carry all westbound traffic

- more traffic through residential areas in town centre

- more traffic on Bayview Avenue would interfere with truck access to Government Wharf.

Advantages

- permits 2-lane one-way operation which would increase traffic volumes.

In conclusion, a one-way system of streets is not advantageous, especially if a truck route can be designated.

4. ACCESS TO GOVERNMENT WHARF

Suggested Routes and Improvements

WEST ACCESS

(a) Route from West to Wharf

* LT or RT off Main Street to Simms Street;
  LT to Bayview Avenue; RT to Wharf

- improvements - widen Rt turn radius Main Street at Simms
  widen Lt turn Simms to Bayview

(b) Wharf to west - same route

- improvements - widen Rt turn Bayview Avenue to Simms Street

EAST ACCESS

(a) Route from East to Wharf

* LT or RT off Main Street to Juniper Road,
  RT to Bayview Avenue; Lt to Wharf

- improvements - none

(b) Wharf to East - same route

- improvements - widen RT turn radius Wharf to Bayview

All improvements should be more precisely determined on the ground. Signs should be posted at Main Street and Juniper Road; as well as Main Street and Simms Street designating the route to the Government Wharf. i.e. (Government Wharf with an arrow).

P. MUNICIPAL FINANCES

The final important area which must be examined is the Municipal Finance situation of the Town of Springdale.

1. Assessment Base

In 1974, the assessment base for the Town of Springdale was $15,055,572. This rose by 42% to $35,931,250 by 1981. Residential as compared to commercial assessments changed slightly, 1% increase in commercial assessment over the 5-year period. However, residential assessments still provide the majority of the revenue generated by local taxes. The ratio of residential assessment to commercial in 1974 was 5.28:1; this decreased to 4.99:1 in 1979 indicating that residential properties are carrying less of the tax load.

2. Revenue

The revenue for 1979, 1980 and 1981 fiscal years are shown in Table 25. The revenue generated by taxation have contributed over 50% of total revenue for the past 3 years. Revenues provided by the Province of Newfoundland and Labrador are on the increase, 4% points over the years.

3. Expenditures

The Town of Springdale has budgeted for expenditures of $739,706.00 in 1981, including provision for long and short term debt charges. This represents a per capita expenditure of $209.85.

TABLE 24

RESIDENTIAL AND COMMERCIAL ASSESSMENT

TOWN OF SPRINGDALE, NEWFOUNDLAND

ASSESSMENT	1974	% OF TOTAL	1979	% OF TOTAL	% CHANGE
Residential	12,659,278	84	29,928,770	83	58
Commercial	2,396,294	16	6,002,550	17	60
TOTAL	15,055,572	100	35,931,250[1]	100	

Source: Town of Springdale

[1]This represents the 1981 Assessment figures as well.

TABLE 25

TOWN OF SPRINGDALE

MUNICIPAL EXPENDITURES

	$/capita [3]	1981 [2]	%	1980 [1]	%	1979 [1]
General Government						
Administration		92,500		90,956		87,264
Other		11,400				
	$ 29.67	103,900	14	90,956	17	87,264
Protection to persons & property						
Fire Protection		12,000		10,856		9,586
Street and Traffic lighting		22,000		19,304		16,762
Police protection		-		-		-
Control of animals		-		972		991
	9.71	34,000	5	31,132	5	27,339
Public Works		83,900		82,989		78,516
Distribution & Maintenance		84,700		65,586		65,772
Stadium				33,011		31,995
	48.16	168,600	28	181,586	34	176,283
Capital Expenditures						
Furniture				12,035		
Equipment		7,500		3,894		
Land & Buildings		5,000		2,686		3,612
Other Projects				7,325		4,758
	3.57	12,500	4	25,940	2	8,370
Debt Charges						
Debentures-principal				7,000		7,000
-interest				6,105		6,598
Other Long-Term Debt						
-principal				93,348		37,897
-interest				147,812		97,028
	87.10	304,956	39	254,266	29	148,523
Sanitation & Waste Removal	13.14	46,000		44,709		43,451
Recreation & Community Service	18.78	65,750		18,470		10,487
Provision for Doubtful Receivables	1.14	4,000		12,705		11,233
	33.06	115,750	12	75,884	13	65,171
TOTAL EXPENDITURES	211.28	739,706		659,764		512,950
Debt charge rates (to total expenditures)		31%		28%		21%

Source: [1] Town of Springdale Auditor's Report - Financial Statement Dec. 31/80

[2] Town of Springdale Draft Budget, 1981

[3] Population 1981 = 3,501

TABLE 26

REVENUE

TOWN OF SPRINGDALE

1979 - 1981

	1981	% OF TOTAL	1980	% OF TOTAL	1979	% OF TOTAL
REVENUE:						
Taxation:						
Property	162,000		159,660		118,570	
Service Fees	93,500		94,903		89,848	
Business Tax	75,000		77,871		66,639	
Grant in lieu of Taxation	11,500		11,700		899	
Other taxation	16,575		30,059		39,287	
	358,575	55	374,193	55	315,245	56
GOVERNMENT GRANTS:						
Federal Contribution			25,000		16,000	
Provincial Contribution						
Municipal Assistance Grant	82,276		82,276		164,810	
Tax Incentives	129,000		106,991			
Debt Grant	69,700		66,528		36,733	
Recreation Grant	9,004		9,005		6,000	
	189,980	44	289,800	43	233,543	40
	648,555	99	163,993	98	538,786	96
Rents	3,000		5,834		10,579	
Interest			5,896		3,682	
Stadium & Lion Club Grants	4,000				4,500	
Miscellaneous			1,471		1,110	
Licences & Permits	150		497		153	
	7,150	1	13,698	2	20,024	4
TOTAL REVENUE	655,705	100	677,691	100	558,810	
	84,000*					

* $84,000 was surplus of prior years allotted to 1981 Budget

RF98

TABLE 27

TOWN OF SPRINGDALE

EXPENDITURE WATER & SEWERAGE

1981

Operation and Maintenance	= $ 66,410
Debt Charges	= $ 154,522
Administration and general	= $ 45,522
	$ 266,291

4. Long Term Debt

As of December 31, 1980, the Town of Springdale had long term debts of $1,680,750.00. This represents 4.7% of the municipal assessment and includes debts associated with the water and sewer system*. This debt load is well within the guidelines used in other jurisdictions to evaluate the financial health of the community**.

As a consolidated basis, the debt charge ratio to total expenditures was 21% in 1979, increasing to 28% in 1980 and 31% in 1981. the debt charge ratio should generally not exceed 25%; however, this is not a rigid rule.***

*A community makes progress by assuming such capital debts and then working them off. Property taxes have generally been on the low side, 5.5 mills. The business tax on financial institutions is 40 mills and oil companies is 45 mills. Tax on other business was 12.5 mills. The tax on water and sewer is $8.50 per month residential and $12.50 per month for commercial.

**The New Brunswick Capital Borrowing Board permits a municipality to carry up to 6% of its assessment as long term debt. This ceiling is exclusive of water and sewer debts.

***For calculation of the debt load, the 1979 assessment was used. It is not expected the debt load percentage would be significantly affected if 1980 assessment had been available.

APPENDIX A

Site Plan Criteria

APPENDIX A

SITE PLAN CRITERIA

When Site Plan Approval is required, the owner shall prepare site development plans, including landscaping, parking, lighting, roads and any or all of the additional items listed below:

(a) the dimension of the site;

(b) the area of the site;

(c) dimensions to indicate the location of all buildings;

(d) dimensions of buildings to provide comprehensive information of their plan form, including future buildings or expansions;

(e) the distance between buildings and all yards;

(f) other uses, a breakdown of floor area by proposed use;

(g) gross floor area of buildings;

(h) dimensions of all parking areas, access roads and driveways;

(i) function and type of landscaped areas;

(j) landscaping plan and specifications including:

- surface treatment (asphalt, grass etc.)
- tree and shrub types and sizes
- location and number of trees to be retained or planted
- dimensions of buffer zones, driveways, etc.
- number and size of parking spaces and location
- location and size of signage
- location and width of all walkways, footpaths
- location of loading zones

(k) a key plan;

(l) proposed contours and drainage of surface runoff ditching;

(m) surrounding land uses;

(n) site constraints, e.g. rights-of-way which exist on the site or adjacent to it, easements, fire routes;

(o) location and intensity specifications for lighting;

(p) location and use of outside storage areas;

(q) perspective drawings and plans showing 4-point building elevations and 2-way cross sections of all buildings shown on the Site Plan.

All site development plans should be submitted to the Municipality for approval.

As a condition of approval for the development or redevelopment of any non-residential use, the Municipality may require the developer to provide the following facilities along that side of the lot which adjoins a residential or a non-compatible use:

(a) increased yards;
(b) planting strips, screening, fencing and/or berms;
(c) deflected lighting; and,
(d) prohibitions on parking, loading and open storage.

APPENDIX B

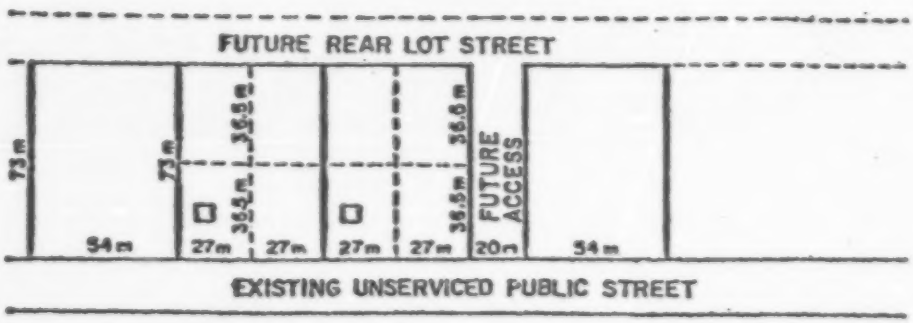
Suggested Placement of Structures on Unserviced Lots

Suggested Placement of Structures on Unserviced Lots.

When development is permitted to occur on large unserviced lots, there are several implications. Some people feel that a 4000 m^2 lot is too large to maintain and therefore neglect a sizeable portion of the grounds. When the municipality services the area where large lots have been permitted, it is several times more costly to provide sewer and water to large lots than it is to service land with a higher density. Obviously, these costs get passed on to the land owners. A way to overcome this problem is to provide for resubdivision by placing the structure on a front quarter of the lot as per Figure B-1 so that if and when municipal services are extended, the lot can be resubdivided.

FIGURE A-4-1

LOT SIZES - UNSERVICED DEVELOPMENT



NOT TO SCALE

*Source: A.D.I. Ltd. - Village de Saint-Joseph Municipal Development Plan, Vol. 2, Draft Municipal Plan, February 1977.

Originally this provides a 4000 m^2 lot which should ensure a properly functioning well and septic tank system, if properly designed, constructed and located. The 54 m frontage allows resubdivision, when services are extended, to two 27 m frontage lots. By placing the house on a front quarter it will ensure that the house would not be placed in the center or some location where future subdivision would not be possible.

APPENDIX C

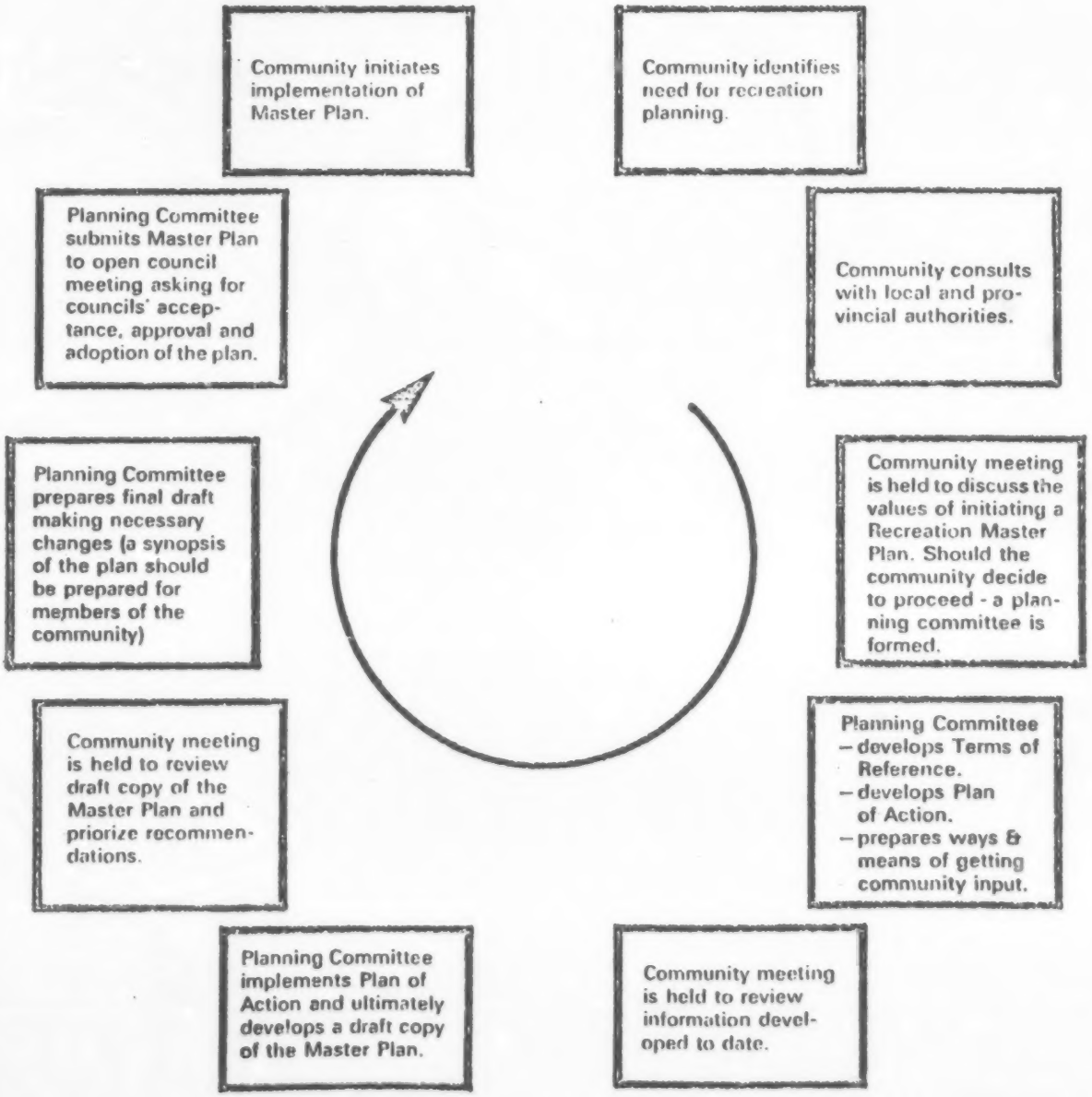
Master Plan Process Chart

A Community Recreation Master Plan is a detailed assessment of the recreational and cultural resources which exist in a community, the identification of future requirements and needs, and a course of action that will lead to the orderly implementation of such services.

It is helpful when developing a plan of this magnitude to establish a logical planning process.

Below is a Master Plan Process Chart based on the preceding data which outlines the basic steps involved in developing a Community Recreation Master Plan.

MASTER PLAN PROCESS CHART


Community identifies need for recreation planning.
Community consults with local and provincial authorities.
Community meeting is held to discuss the values of initiating a Recreation Master Plan. Should the community decide to proceed - a planning committee is formed.
Planning Committee
– develops Terms of Reference.
– develops Plan of Action.
– prepares ways & means of getting community input.
Community meeting is held to review information developed to date.
Planning Committee implements Plan of Action and ultimately develops a draft copy of the Master Plan.
Community meeting is held to review draft copy of the Master Plan and priorize recommendations.
Planning Committee prepares final draft making necessary changes (a synopsis of the plan should be prepared for members of the community)
Planning Committee submits Master Plan to open council meeting asking for councils' acceptance, approval and adoption of the plan.
Community initiates implementation of Master Plan.

MAPS NOT

FILMED

CARTES

OMISES

POOR

QUALITY

ORIGINAL